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CITY OF CERES
GENERAL PLAN

FINAL ENVIRONMENTAL IMPACT REPORT

SCH #95052017

Prepared by

J. Laurence Mintier & Associates
Dowling Associates
Lew-Garcia-Davis
H.T. Harvey & Associates
Donald Ballanti
Brown-Buntin Associates

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THE UNIVERSITY OF CHICAGO
DEPARTMENT OF POLITICAL SCIENCE
1100 EAST 58TH STREET
CHICAGO, ILLINOIS 60637

1. The first section of the paper discusses the theoretical framework and the research objectives. It outlines the importance of understanding the political behavior of citizens in the context of democratic societies. The second section provides a detailed review of the existing literature on the topic, highlighting the contributions of various scholars and identifying the gaps in the current knowledge. The third section describes the research methodology, including the data sources and the statistical techniques used for data analysis.

4. The fourth section presents the empirical findings of the study, showing the results of the statistical analysis. It discusses the patterns and trends observed in the data, and compares them with the theoretical expectations. The fifth section provides a discussion of the implications of the findings for the understanding of political behavior and for the development of policy recommendations.

6. The sixth section concludes the paper by summarizing the main findings and reiterating the importance of the research. It also suggests directions for future research and acknowledges the limitations of the study. The final section contains the references and the appendix, which provide additional information and data for the reader.

8. The eighth section of the paper discusses the theoretical framework and the research objectives. It outlines the importance of understanding the political behavior of citizens in the context of democratic societies. The ninth section provides a detailed review of the existing literature on the topic, highlighting the contributions of various scholars and identifying the gaps in the current knowledge.

10. The tenth section describes the research methodology, including the data sources and the statistical techniques used for data analysis. The eleventh section presents the empirical findings of the study, showing the results of the statistical analysis. It discusses the patterns and trends observed in the data, and compares them with the theoretical expectations.

12. The twelfth section provides a discussion of the implications of the findings for the understanding of political behavior and for the development of policy recommendations. The thirteenth section concludes the paper by summarizing the main findings and reiterating the importance of the research. It also suggests directions for future research and acknowledges the limitations of the study.

14. The final section contains the references and the appendix, which provide additional information and data for the reader.

INTRODUCTION

This Final Environmental Impact Report (FEIR) on the City of Ceres General Plan has been prepared pursuant to the California Environmental Quality Act (CEQA). This FEIR documents the environmental considerations incorporated into the process of preparing the General Plan and evaluates the environmental implications and effects of the plan. CEQA mandates the preparation of draft and final environmental impact reports for projects or programs that have the potential of resulting in adverse impacts on the environment. Detailed requirements concerning both content and process are set forth in the California Code of Regulations, Title 14, Chapter 3: Guidelines for Implementation of the California Environmental Quality Act (hereinafter referred to as State CEQA Guidelines).

THE PURPOSE OF THIS EIR

The purposes of CEQA (and thus EIRs) are summarized in Article 1 of the State CEQA Guidelines. Article 1 reads, in part, as follows:

§15002. General Concepts.

(a) Basic Purposes of CEQA. The basic purposes of CEQA are to:

- (1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- (2) Identify ways that environmental damage can be avoided or significantly reduced.
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Subsection (f) of this section summarizes the purpose and content of an EIR:

(f) Environmental Impact Reports and Negative Declarations. An environmental impact report (EIR) is the public document used by the governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid the possible environmental damage.

- (1) An EIR is prepared when the public agency finds substantial evidence that the project may have a significant effect on the environment. (See §15064(a)(1).)

Subsection (g) summarizes the concept of "significant effect":

(g) Significant Effect on the Environment. A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. (See §15382). Further, when an EIR identifies a significant effect, the government agency approving the project must make findings on whether the adverse environmental effects have been substantially reduced or if not, why not. (See §15091.)

§15121. Informational Document

(a) An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.

(b) While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and, if necessary, by making a statement of overriding considerations under Section 15093.

(c) The information in an EIR may constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court.

This EIR serves two basic purposes. First, it establishes the environmental framework for adoption of the General Plan, providing information to the public, General Plan Review Committee, Planning Commission, and City Council concerning the potential consequences of adopting the plan, and, second, it serves as a first-tier EIR for subsequent EIRs on projects implementing the General Plan (e.g., areawide plans, specific plans, individual projects).

RELATIONSHIP OF THE GENERAL PLAN AND EIR

The State CEQA Guidelines provides the following general directions concerning the coordination of planning and environmental impact assessment:

§15080. General.

To the extent possible, the EIR process should be combined with the existing planning, review, and project approval process used by each public agency.

The State CEQA Guidelines provides for combining the EIR with the general plan as follows:

§15166. EIR as Part of a General Plan.

(a) The requirements for preparing an EIR on a local general plan, element, or amendment thereof will be satisfied by using the general plan, or element document, as the EIR and no separate EIR will be required, if:

(1) the general plan addresses all the points required to be in an EIR by Article 9 of these Guidelines; and

(2) the document contains a special section or a cover sheet identifying where the general plan document addresses each of the points required.

This Environmental Impact Report (EIR) documents the environmental considerations incorporated into the process of preparing the General Plan and evaluates the environmental implications and effects of the draft plan. In accordance with the two sections of the State CEQA Guidelines cited above, and in an effort to minimize repetition of information, three separate General Plan documents are being used to satisfy the requirements for an EIR. These are: 1) the General Plan Policy Document; 2) the General Plan Background Report, which describes existing conditions and trends in Ceres; and 3) this Environmental Impact Report, which assesses the environmental implications and effects of the General Plan. Together, these three documents address all of the issues required by state law to be covered in an EIR.

USE OF THIS EIR AS A PROGRAM EIR/MEA

The precise format of an EIR is not dictated by CEQA or the State CEQA Guidelines, but is left to the discretion of the lead agency preparing the EIR. Several types of EIR or alternatives for formatting EIRs are described in the State CEQA Guidelines. Of particular relevance to a general plan EIR are Program EIRs and Master Environmental Assessments (MEAs).

The State CEQA Guidelines describes a Program EIR as follows:

§15168. Program EIR.

(a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- (1) Geographically,
- (2) As logical parts in the chain of contemplated actions,
- (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
- (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The State CEQA Guidelines describes a Master Environmental Assessment as follows:

§15169. Master Environmental Assessment.

(a) General. A public agency may prepare a Master Environmental Assessment, inventory, or data base for all, or a portion of, the territory subject to its control in order to provide information which may be used or referenced in EIRs or Negative Declarations. Neither the content, the format, nor the procedures to be used to develop a Master Environmental

Assessment are prescribed by these Guidelines. The descriptions contained in this section are advisory. A Master Environmental Assessment is suggested solely as an approach to identify and organize environmental information for a region or area of the state.

The chief advantage of Program EIRs and Master Environmental Assessments (MEAs) is that they can be used to streamline CEQA compliance for a broad range of subsequent projects. Program EIRs or MEAs can be used as the basis for preparing initial studies on individual projects; they can be used as the basis for issuing negative declarations on individual projects; and they can be referenced in subsequent EIRs to address major and cumulative impacts of projects, allowing project-level EIRs to focus on more site-specific impacts. Preparing a Program EIR or MEA does not obviate the need for environmental analysis on individual projects, but it can expedite and simplify subsequent environmental reviews under CEQA.

For these reasons, this EIR has been organized and is intended to be used as both a Program EIR and a Master Environmental Assessment.

FORECASTING, DEGREE OF SPECIFICITY, AND SPECULATION

The State CEQA Guidelines includes the following discussions regarding forecasting, speculation, and the degree of specificity required in an EIR:

§15144. Forecasting

Drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

§15145. Speculation

If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

§15146. Degree of Specificity

The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

(a) An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

(b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be

expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

This EIR estimates the amount of development under the General Plan that could be expected by 2015 and reaches conclusions regarding the severity of impacts based on these estimates. In some cases, especially where natural resources will be converted, the possible effects of development beyond 2015 are also discussed, but no conclusions concerning the significance of these impacts are reached, as such conclusions are deemed too speculative for the purposes of this EIR given uncertainty about long-term growth trends (beyond 2015) and future technological advances. The EIR focuses particularly on the cumulative impacts of development under the General Plan through 2015. The EIR is necessarily less detailed than would be an EIR on a specific development project. Future development projects will be required to conduct environmental analysis and analyze site-specific impacts.

ORGANIZATION OF THIS DOCUMENT

This Final Environmental Impact Report (FEIR), which as noted above is one of three reports being used to satisfy the requirements of CEQA, has been prepared as a comprehensive revision of the Draft EIR, which was published in April 1996. Revisions to the Draft EIR reflect two types of change: (1) those made in response to land use and policy changes made by the City Council to the Draft General Plan as a result of public review of the Draft Policy Document; and (2) editorial, substantive, and technical changes made in response to comments received on the Draft EIR.

This Environmental Impact Report is divided into ten chapters as follows:

Chapter 1 (Project Description and Impact Summary) describes the project setting, defines the project, explains Ceres' General Plan Update process, and summarizes the significant environmental effects of the plan.

Chapter 2 (Assumptions and Development Estimates) summarizes and explains the assumptions used in preparing the development estimates upon which the EIR assessment is based. It includes a discussion of the methodology used to calculate new development potential and projections for projected housing, employment, and employment growth that will be accommodated under the General Plan.

Chapter 3 (Land Use, Housing, and Population) evaluates the land use, housing, and population impacts of the plan.

Chapter 4 (Transportation and Circulation) assesses transportation and circulation impacts, including roadways, public transit, non-motorized transportation, and air transportation.

Chapter 5 (Public Facilities and Services) reviews impacts on public facilities and services, including water supply and delivery; wastewater collection, treatment, and disposal; storm drainage; law enforcement; fire protection; solid waste collection and disposal; public utilities; schools; and libraries.

Chapter 6 (Recreational and Cultural Resources) assesses the plan's impact on recreational and cultural resources, including parks and historic and archaeological resources.

Chapter 7 (Agricultural and Natural Resources) examines the plan's impacts on natural resources including water resources, mineral resources, vegetation and wildlife resources, and air quality.

Chapter 8 (Health and Safety) reviews health and safety impacts of the plan, including seismic and geologic hazards, flooding, fire hazards, noise, hazardous wastes, and airport crash hazards.

Chapter 9 (Alternatives and Other Mandatory CEQA Sections) addresses mandatory EIR sections, including alternatives, significant irreversible effects, growth-inducing impacts, cumulative impacts, and mitigation monitoring.

Chapter 10 (Draft Policy Document/Draft EIR Comments and City Responses) contains the City's responses to comments submitted on the Draft General Plan and Draft EIR. It includes a photocopy of each comment letter submitted during the Draft EIR 45-day review period, with each individual comment marked with a unique identifier. Following each letter is the City's formal response. This chapter also summarizes oral comments made at public hearings concerning the Draft EIR along with the City's response to these comments.

Appendix A: Appendix A describes the air quality modeling methodology and assumptions that are the basis for the air quality analysis in Chapter 7 of this EIR.

The General Plan and this EIR were prepared simultaneously in an effort to identify early on potentially significant implications of the plan and to build into the plan policies and programs to minimize or avoid these adverse implications. The format and content of the environmental impact analysis in this EIR reflect this approach to preparing the General Plan.

Accordingly, for each subject addressed in Chapters 3 through 8, the discussion is generally broken into the following six parts:

Environmental Setting: This section briefly summarizes pertinent information concerning existing conditions. Since the General Plan Background Report constitutes the comprehensive setting for the EIR, this section focuses on the highlights, while referring the reader to appropriate sections of the Background Report.

Methodology: This section discusses the assumptions and methodology used to identify implications and to assess impacts.

Implications of the Land Use Diagram: This section projects conditions that could result from the development of the land uses shown on the General Plan Land Use Diagram without consideration of the policies and programs included in the General Plan Policy Document. This part focuses primarily on implications of estimated development within the Urban Growth Area.

General Plan Policy Response: This section references specific policies and programs contained in the General Plan Policy Document that address the implications identified in the previous part. While this discussion focuses primarily on policies and programs that respond directly to the potential negative implications of the Land Use Diagram, it also in some cases identifies policies or programs that reduce impacts that may not be considered significant.

Impacts: This section describes any negative environmental impacts of the Land Use Diagram which would remain unresolved or potentially unresolved by the policies and programs contained in the Policy Document. The discussion includes an assessment of the severity of the impact, including a conclusion as to whether impacts are considered significant according to CEQA. The impacts are characterized as "significant," "potentially significant," or "less-than-significant."

Mitigation Measures: This section identifies mitigation measures that could lessen or eliminate negative impacts identified as "significant" or "potentially significant" according to CEQA standards, or, in some cases, to identify additional mitigation for impacts that are considered "less-than-significant."

CHAPTER 1

PROJECT DESCRIPTION AND IMPACT SUMMARY

1.1 INTRODUCTION

The subject of this Environmental Impact Report (EIR) is a comprehensive update of the City of Ceres General Plan. This chapter of the EIR describes the project setting, defines the project, explains the City of Ceres' General Plan update process, and summarizes the environmental effects of the Plan found to be significant or potentially significant according to the standards of the California Environmental Quality Act (CEQA). Chapter 2 of this EIR contains the assumptions and calculations used as the basis for the analysis in this report.

1.2 PROJECT SETTING

Ceres is located in central Stanislaus County, adjacent to and south of Modesto, the County seat. Ceres is located approximately 75 miles south of Sacramento on State Route 99 and 100 miles east of Oakland via the 5, 205, and 580 freeways. The Tuolumne River runs along the northern edge of Ceres.

As of January 1994, Ceres encompassed approximately 5.6 square miles, or 3,580 acres, of incorporated territory. According to a parcel-based land use inventory assembled by the City, approximately 3,000 acres of this area is subdivided land (i.e., excluding streets, canals, easements, and other rights-of-way). (Note that in 1996, the City annexed approximately 480 acres of land on the west. Since this area is undeveloped, it does not alter the conclusions in this EIR). Within the boundaries of its city limits, the City includes several unincorporated islands which remain under County jurisdiction.

A detailed description of the environmental setting of Ceres is contained in the General Plan Background Report, which is formally incorporated by reference as part of this Environmental Impact Report. The Background Report is organized according to the following nine chapters:

- Chapter 1: Land Use
- Chapter 2: Urban Form and Design
- Chapter 3: Population
- Chapter 4: Economic Conditions and Fiscal Considerations
- Chapter 5: Transportation
- Chapter 6: Public Facilities and Services
- Chapter 7: Recreational and Cultural Resources
- Chapter 8: Agricultural and Natural Resources
- Chapter 9: Safety
- Chapter 10: Noise

1.3 PLANNING AREAS

The following is a summary description of the Planning Area and subareas described in the General Plan and this EIR.

PLANNING AREA

The area for which this General Plan designates land uses and applies its policies and standards is called the Planning Area. As shown in Figure 1-1, the Planning Area is bounded by the Tuolumne River on the north, Carpenter Road on the west, Grayson Road on the south, and Washington Road on the east, encompassing approximately 14,700 acres. The Planning Area includes the City of Ceres' Urban Growth Area (described below), areas designated as reserve for future urban development beyond the time frame of the General Plan (2015), some territory within the city of Modesto and its sphere of influence, and the northernmost part of the unincorporated community of Keyes. The remaining area is designated for agricultural and open space uses.

URBAN GROWTH AREA

Within the Planning Area, the General Plan includes an Urban Growth Area (see Figure 1-1) that encompasses approximately 7,650 net acres. The Urban Growth Area includes all land envisioned for development as part of Ceres through the year 2015. This area is further divided into two phases of development to ensure orderly development and prevent premature conversion of agricultural lands. The first phase includes 6,150 net acres of land, intended to be developed first. The second phase encompasses another 1,500 net acres, to be developed after the first phase is close to full development.

ADJACENT URBAN AREAS

The General Plan designates 1,830 acres as Adjacent Urban (AU). Most of the Adjacent Urban area is designated in the northwestern part of the Planning Area and includes territory within the city of Modesto and unincorporated areas within Modesto's sphere of influence. A smaller area on the southeast includes the northernmost part of the unincorporated community of Keyes. These areas are included because of their proximity to Ceres and their relationship to development in Ceres. These areas are not contemplated as a future part of Ceres and will continue to be under the jurisdiction of the city of Modesto or Stanislaus County.

RESERVE AREAS

The Planning Area also includes areas designated for Residential and Industrial Reserve, 970 acres and 575 acres, respectively. These areas are intended for future planning and consideration for development after 2015. Areas designated as Residential Reserve or Industrial Reserve are assumed to remain in agricultural use or existing urban uses and under the jurisdiction of Stanislaus County through the time frame of the General Plan (2015). No development can occur within the Reserve areas without a General Plan amendment. Following completion of a study considering the development potential of this area, the City would prepare an EIR specifically addressing the impacts of any proposed development in this area.

AGRICULTURAL AREAS

The remaining 3,750 acres within the Planning Area are designated Agriculture (A), to remain in agricultural use and under the jurisdiction of Stanislaus County.

1.4 THE GENERAL PLAN PREPARATION PROCESS

The City of Ceres initiated its general plan update program in the Fall of 1993 when it retained a multi-disciplinary consulting team headed by J. Laurence Mintier & Associates to assist the City in its comprehensive update effort. In early 1994, the City conducted a community concerns survey, the consultants interviewed City officials, and the General Plan Review Committee held a townhall meeting. The results of these efforts were summarized in the Community Concerns Summary Report, published in June 1994. The consulting team also prepared a detailed background report describing existing conditions and trends in Ceres. The General Plan Background Report, also published in June 1994, includes chapters addressing ten subject areas: land use; urban form and design; population; economic conditions and fiscal considerations; transportation; public facilities and services; recreation and cultural resources; natural and agricultural resources; safety; and noise. The Background Report provides the factual foundation for the Policy Document and also serves as the environmental setting description for this Environmental Impact Report.

After publication of the Draft Background Report in June 1994, the next major step in the Update process was to identify key constraints, opportunities, and options for the General Plan and to summarize them for public review. The result was the Opportunities, Constraints, and Options Report, which presented the most critical policy issues to be addressed in the new General Plan. These issues were identified based on the Draft General Plan Background Report, Community Concerns Summary Report, and extensive discussion with local officials and other community and business leaders.

Following publication of the Opportunities, Constraints, and Options Report in September 1994, the General Plan Review Committee (GPRC) hosted two townhall meetings (one in September and one in October) to present the report to the public and receive public input. The GPRC then held three meetings during November and December 1994 to consider the report and provide recommendations to the Planning Commission and City Council concerning the issues addressed in the Opportunities, Constraints, and Options Report. In addition, the Parks and Recreation Commission held a meeting in November 1994 to consider the report and develop recommendations for the Commission and Council.

In January 1995, the City Council and Planning Commission held a joint public hearing to receive public input on the report. In January and February, the Planning Commission deliberated on the report and developed its recommendations to the City Council. In February and March 1995, the City Council in turn deliberated and provided staff and the Consultants with policy direction for preparing the Draft General Plan.

Based on the Council's direction, City staff and Consultants worked with the General Plan Review Committee in preparing the Draft General Plan Policy Document and Draft Land Use

Diagram. The Draft Policy Document and the Draft Environmental Impact Report (DEIR) assessing the potential environmental implications of the draft plan were released for public review in April 1996. In June 1996, the General Plan Review Committee, the Planning Commission, and the City Council held a joint hearing on the draft plan and DEIR. The General Plan Review Committee made its recommendations on the draft plan to the Planning Commission in September 1996. The Planning Commission in turn made its recommendations to the City Council in October 1996. The City Council considered the recommendations, took further public input, and directed City staff and Consultants to make a final set of revisions to the draft documents before adopting the General Plan in February 1997.

1.5 CERES GENERAL PLAN CONTEXT

The following discussions briefly describe growth projections, physical constraints, and the issues that provide the context for preparation of the General Plan.

The most significant issues addressed in the Policy Document concern growth and development. Ceres has grown rapidly over the last 20 years and conditions are projected to favor significant growth in Ceres over the next 20 years. This section describes the major issues related to growth and development in Ceres.

The Community Concerns Summary Report summarized local concerns about future growth and development in Ceres. The most significant survey response addressed the overall character and role of Ceres in the future. The community survey questionnaire asked residents what they liked most about living in Ceres and also asked residents why they chose to live in Ceres. Over two-thirds of survey respondents said they liked Ceres' small-town character.

One of the most common complaints about Ceres related to the lack of economic development, including insufficient employment opportunities and commercial development, which is fairly typical of cities of Ceres' size. The Policy Document includes policies and programs intended to reconcile the potentially conflicting objectives of maintaining Ceres' small-town qualities and providing for the kinds and levels of development that provide greater convenience and economic opportunities for residents.

OPPORTUNITIES

Ceres has substantial opportunity for growth and development, primarily because of projected high rates of growth in the area and available land to accommodate development. These opportunities are described in this section.

Projected High Rates of Growth

As described in the Background Report, population and employment growth in Stanislaus County and the entire San Joaquin Valley were rapid throughout the 1980s and into the early 1990s. Stanislaus County's total population grew at an annual rate of 3.3 percent between 1980 and 1993, adding nearly 11,000 people per year. These gains created opportunities for economic development and job formation throughout the county. Ceres' population has doubled in each of

the last two decades. Population in Ceres, Stanislaus County, and throughout the San Joaquin Valley is projected to grow at continued high rates over the next 20 years. In 1993, the Stanislaus Area Association of Governments (SAAG) projected that population in Ceres would grow from over 30,000 in 1994, to 51,200 in 2005, to 73,200 in 2015. Anticipated annexation of another 8,400 residents of the unincorporated area already living within Ceres' sphere of influence would also add to the city's population by 2015. Nonresidential growth is also expected to continue.

Growth in the 1980s and early 1990s resulted from two sources: rapid increases in the local employment base and rapid gains in commuters with jobs in the San Francisco Bay Area and San Joaquin County. Local job growth accounted for approximately two-thirds of the gains in population in Stanislaus County and commuter growth accounted for the remainder. Both of these job sources are expected to influence growth into the future.

The Central Valley fared better than the state as a whole during the economic slowdown of the first half of the 1990s, and its recovery has been more rapid. Employment in the Central Valley experienced neither the rapid annual gains of the 1980s nor the job losses seen in other areas of the state. The outlook for continued and strong growth in the Central Valley and Stanislaus County therefore appears to be very promising.

Land Availability for Expansion

One of the most important considerations in the development of the General Plan was the large supply of land surrounding Ceres to the west, east, and south. The supply of land, combined with its relatively low cost compared with the greater San Francisco Bay Area, make Stanislaus County an attractive and affordable location for development.

CONSTRAINTS

Despite obvious opportunities for growth and development in Ceres, there are also some constraints to growth. These can essentially be broken down into three broad categories: economic, physical, and policy or political. Economic conditions will ultimately determine how large Ceres is likely to become and how fast the city is likely to develop, while physical constraints will govern to a great extent the location of development. Policy variables or constraints will have a bearing on both the rate and character of growth.

State and Local Financing Problems

Prior to 1978, cities in California relied heavily on property taxes as a source of municipal revenues. With the passage of Proposition 13 in 1978, however, property tax revenues declined in importance as sales tax revenues have become increasingly important. One result of the increasing reliance on sales tax for revenue has been the active pursuit by local governments in California of commercial development and its associated tax receipts to fill-in gaps left by reductions in property tax revenue.

In the 1990s, the State of California has had increasing fiscal problems because of decreased sales and income taxes resulting from the recession, and it has diverted some of the property tax revenues that were typically allocated to cities and counties, exacerbating local fiscal problems.

Future growth in Ceres will occur primarily by annexing areas outside the current city limits. After annexation, the City begins to receive a portion of the one percent property tax levied on the parcel that was previously allocated to the County. The amount of the transfer from the County to the City was determined based on a master property tax allocation agreement between the County and the City. In 1996, however, Stanislaus County terminated its master property tax agreement with cities in the county, requiring negotiations on a new property tax agreement.

Tax sharing has become a critical issue as a result of the demands by the counties and the fiscal problems of the state during the 1990s. The State reduced the amount of revenues distributed to California schools by 20 percent, and in the process forced counties to redirect some of the property taxes to the schools that had formerly been distributed to the cities. Ceres lost approximately 20 percent of its total property tax income during these years (the actual amounts lost varied from city to city), and those funds are not likely to return to cities any time soon, if ever. The recent California Supreme Court decision on Proposition 132 raises questions concerning the ability of the City to use utility tax funding to address these cutbacks in the future. In addition, counties are increasingly asking cities to require new development to help fund not only capital facilities but also operating costs for needed services provided by counties and mandated by the State (e.g., courts, jails).

The reductions in property taxes raise some serious questions regarding future growth for Ceres, and cities throughout the state. While residential development typically does not provide enough property tax revenue to pay for needed services, a strong residential base is usually required to attract and retain commercial and industrial development. Commercial development in particular provides sales taxes and typically generates more revenue to cities than the costs of associated services.

Competition From Modesto and Stanislaus County

As the largest city in Stanislaus County, Modesto dominates commercial activity in the county, making it difficult for Ceres to compete for new retail and other commercial investment, especially given its proximity to Modesto. As of 1994, Modesto accounted for 57 percent of the total retail sales in the county with only 44 percent of the countywide population, while Ceres accounted for about 6 percent of total retail sales with 7 percent of the county's population.

Ceres also competes with unincorporated areas of Stanislaus County for commercial and industrial investment, particularly automobile and farm machinery sales. In fact, most of the new industrial development in Stanislaus County over the past decade has been in unincorporated areas.

Agricultural Land

Agriculture has historically been the engine of growth in Stanislaus County. Most of the communities in the county emerged as service centers for its agricultural base. While the larger communities have diversified, agriculture still plays an important role in the industrial base and employment of these cities and for the county.

The San Joaquin Valley contains much of the best remaining farmland in the state; the General Plan recognizes the importance of preservation of this farmland. The prime agricultural land surrounding Stanislaus County's cities represents a potential constraint to continued urbanization in Stanislaus County. As in the case of most San Joaquin Valley communities, expansion of Ceres will result in the conversion of agricultural lands and displacement of farmers.

Air Quality

Air quality is severely degraded in the San Joaquin Valley. The Valley's meteorology, combined with air pollutants transported into the air basin from the San Francisco Bay Area and Sacramento area, and locally-generated pollutants from automobiles, factories, and agricultural operations, results in contaminant levels within the San Joaquin Valley Air Basin surpassed only by the South Coast Air Basin of Los Angeles.

One of the major reasons that air quality continues to be a problem in the San Joaquin Valley and throughout California is a relatively high rate of population and economic growth. Increasing population and automobile use, and increasing congestion on roadways will hinder improvements in the region's air quality.

The most efficient and cost-effective technological or "hardware" controls currently available have already been implemented (e.g., emission controls on industries, catalytic converters in automobiles) throughout California. In recent years, attention has focused on the relationship of land use, community design, and modes of transportation as a means of reducing air pollutant generation.

Federal air quality and transportation regulations may act to constrain or affect future development patterns through two means: federal transportation and air quality acts. Federal transportation planning and funding changed its focus with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA). ISTEA governs the allocation of federal transportation funds for transportation projects in the states, and the Act promotes funding of alternative transportation modes (transit, rail, pedestrian, bicycling) rather than primarily emphasizing highway development. Secondly, the Federal Clean Air Act mandates states, and thus local air districts, to prepare plans to achieve attainment of federal air quality standards. Failure to prepare a plan that satisfies federal requirements could potentially result in the loss of federal transportation funds.

While air quality is often regarded as a regional problem, local land use and growth decisions by cities and counties will profoundly affect future air quality. The San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) has prepared Air Quality Element Guidelines for the preparation of policies and programs relating to air quality in general plans. Air quality issues may act as a general constraint on growth. Air quality regulations may also require local

governments to consider alternative patterns and forms of land use and transportation development as a means of reducing automobile use.

Geographic Constraints

Geographic constraints or limits on growth and development include physical features or jurisdictional boundaries that limit or direct where growth can occur in and around Ceres. The most obvious physical constraint is the Tuolumne River on the north that forms a clear natural boundary between Ceres and Modesto east of Highway 99. West of State Route 99, the City of Modesto extends south of the river to Whitmore Avenue. Ceres' and Modesto's spheres are adjacent on the northwestern part of Ceres. Ceres cannot grow into land occupied by another jurisdiction, and where possible it is desirable to maintain separation to foster community identity. The unincorporated community of Keyes is located about one mile to the south on SR 99.

Patterns of Existing Development

Existing land use patterns and roadway layout also dictate where and how future growth can occur. Ceres' major roadways create the structure of the city, and future development must build on and expand this system. These roadways, their locations, and capacities, will generally determine the form of the future circulation system and limit or determine the locations of future development.

The locations of existing developments also influence future choices. For instance, the Modesto City-County Airport, located immediately north of Ceres, limits the types and densities of development in northeast Ceres in the airport approach zone. Similarly, existing industrial development can limit the types of adjacent uses.

Major thoroughfares and intersections are desirable locations for future commercial areas and therefore influence decisions of future commercial development.

Public Attitudes Towards Growth

In two community surveys, Ceres residents were asked about growth rates in Ceres. In a 1989 survey, 57 percent responded that Ceres was growing too fast, 40 percent said the growth rate was about right, and only 3 percent felt the city was growing too slowly. This survey was conducted during the peak of Ceres' growth in the late 1980s. In 1994, the General Plan Community Concerns Survey asked the same question. The percentage responding that Ceres had grown too fast had fallen to 43 percent, while almost the same number answered that Ceres' growth rate was just right. Nearly 7 percent felt the City had grown too slow. This change in attitude probably reflects a decline in the city's growth rate in the early 1990s from the high rates of the late 1980s.

Public attitudes towards growth can vary based on the economic climate. During times of economic prosperity and rapid growth, public sentiment tends to either oppose growth or favor limited growth. During recessionary times, public opinion generally favors economic growth.

Based on the two community surveys, Ceres residents seem to reflect this tendency, although Ceres residents still express a concern that growth not result in a decline in their quality of life.

Public Facility Financing

The physical growth of a community necessarily requires expansion of public facilities and services. Grants and tax revenues historically funded these improvements. With the changes in local financing, new development throughout California is being required to fund the facilities needed to serve itself. To address this issue, the City adopted a Public Facilities Plan in 1990 that examined the public facilities that would be required to serve development within its sphere of influence and used this as the basis for establishing development fees. The Public Facilities Plan establishes the framework for funding capital facilities to serve development within the sphere of influence.

To expand beyond its present city limits, the City will need to extend its public facilities and services and provide for additional facilities as part of its Public Facilities Plan; it will also need to raise the necessary capital, probably through bond issuance. The financing of public facilities is therefore both an economic constraint and a policy or political constraint.

1.6 SUBJECT OF THIS EIR

The update of the Ceres General Plan entails a set of several related actions, which combined constitute the "project" for purposes of this EIR. Following are brief descriptions of each aspect of the project.

ADOPTION OF THE NEW GENERAL PLAN

The adoption of the new General Plan is the most significant action of this update program. The requirements included in six state-mandated elements of the general plan are included in the new General Plan: (1) Land Use; (2) Circulation; (3) Safety; (4) Noise; (5) Open Space; and (6) Conservation. As permitted by law, the updated plan also addresses optional issues of local importance (e.g., public facilities). The seventh mandatory element, the Housing Element, was adopted in August of 1992 to meet specific statutory deadline requirements and was not comprehensively updated. The following General Plan documents were superseded upon adoption of the new General Plan:

1. Open Space and Agriculture Element, adopted June 1973
2. Scenic Highway Element, adopted November 1977
3. Land Use Element, adopted November 1984, as amended through 1996
4. Noise Element, adopted June 1990
5. Safety Element, adopted September 1990
6. Public Facilities Element, adopted October 1990
7. Circulation Element, adopted December 1991

Additional modifications to the Mitchell Road Corridor Specific Plan were also made in conjunction with the General Plan Update.

The following paragraphs summarize the organization and content of the General Plan.

The Ceres General Plan consists of two documents: the General Plan Background Report and the General Plan Policy Document. The General Plan Background Report, which inventories and analyzes existing conditions and trends in Ceres, provides the formal supporting documentation for general plan policy.

Summary of New General Plan

The General Plan Policy Document is divided into two main parts. Part I is a summary of the General Plan, describing the nature and purpose of the plan, highlighting the guiding principles of the plan, and outlining the plan's main proposals. It does not constitute formal general plan policy, but is rather a guide to understanding and interpreting Part II of the Policy Document.

Part II contains explicit statements of goals, policies, standards, implementation programs, and quantified objectives that constitute the formal policy of the City of Ceres for land use, development, and environmental quality. Part II is divided into chapters corresponding to the organization of issues addressed in the General Plan Background Report plus a final chapter on administration and implementation. These are as follows:

- Chapter 1: Land Use and Community Design
- Chapter 2: Housing
- Chapter 3: Transportation and Circulation
- Chapter 4: Public Facilities and Services
- Chapter 5: Recreational and Cultural Resources
- Chapter 6: Agricultural and Natural Resources
- Chapter 7: Health and Safety
- Chapter 8: Administration and Implementation

Each chapter includes several goal statements relating to different sub-issues or different aspects of the topic addressed in the chapter. For each goal statement there are several policies that amplify the goal statement. Implementation programs are listed at the end of each policy section and describe briefly the proposed action, the City agencies or departments with primary responsibility for carrying out the program, and the time frame for accomplishing the program. Chapter 1 (Land Use and Community Design) contains the Land Use Diagram, describes the designations appearing on the Diagram, and outlines the standards of population density and building intensity for these land use designations. Chapter 3 (Transportation and Circulation) contains the Circulation Diagram and a description of the roadway classification system. Chapter 2 (Housing) also includes a statement of quantified housing objectives required by state law as part of the housing element.

The following definitions describe the nature of the statements of goals, policies, standards, implementation programs, and quantified objectives as they are used in the Policy Document:

Goal: The ultimate purpose of an effort stated in a way that is general in nature and immeasurable.

Policy: A specific statement in text or diagram guiding action and implying clear commitment.

Standard: A specific, often quantified guideline, incorporated in a policy or implementation program, defining the relationship between two or more variables. Standards can often translate directly into regulatory controls.

Implementation Program: An action, procedures, program, or technique that carries out general plan policy. Implementation programs also specify primary responsibility for carrying out the action and a time frame for its accomplishment. These time frames are general guidelines and may be adjusted based on City staffing and budgetary issues.

The Policy Document includes three supporting appendices. Appendix A is the Annexation Policy; Appendix B is a compilation of policies and programs related to air quality; and Appendix C is a Glossary of key terms used in the Policy Document.

As indicated earlier, the formal policy content of the General Plan is contained in Part II of the Policy Document. Part II is divided into eight chapters, each of which deals with a broad topic and several subissues related to the main topic. The following is a chapter-by-chapter summary of the major proposals set forth in the Ceres General Plan, including references to show how the goals, policies, implementation programs, and diagrams in each chapter relate to the major themes described above.

Chapter 1: Land Use and Community Design

This section is the most tangible of all of the policy sections in the General Plan. It contains the Land Use Diagram that prescribes uses for all of the Planning Area, describes standards for each of the land use designations shown on the Land Use Diagram, and articulates a series of goals, policies, and programs designed to guide decisions concerning land use, development, and environmental protection in Ceres. Figure 1-2 is a reduced-size version of the Land Use Diagram adopted as part of the Policy Document.

Land Use Diagram: The Land Use Diagram includes 23 land use designations falling within five major categories, as shown in the following chart:

LAND USE DESIGNATIONS

CATEGORY	LABEL	DESIGNATION
Residential	RA	
	VLDR	
	LDR	
	MDR	
	HDR	Residential Agriculture
		Very Low Density Residential

Low Density Residential
 Medium Density Residential
 High Density Residential
 Commercial O
 NC
 CC
 HC
 SC
 RC
 DCR Office
 Neighborhood Commercial
 Community Commercial
 Highway Commercial
 Service Commercial
 Regional Commercial
 Downtown Commercial Residential
 Industrial BP
 LI
 GI Business Park
 Light Industrial
 General Industrial
 Other CR
 CF
 S
 P
 AU
 A Commercial Recreation
 Community Facilities
 Schools
 Parks
 Adjacent Urban
 Agriculture
 Reserve RR
 IR Residential Reserve
 Industrial Reserve

It is important that the users of the Policy Document understand that the goals, policies, standards and programs articulated in Part II are as important, if not more so, than the Land Use Diagram in representing the City's land use and development policy. Accordingly, any development proposals or review must consider the Policy Document as a whole, rather than focusing solely on the Land Use Diagram or on particular policies and programs.

Following are summaries of the General Plan's key land use proposals according to each of the major designation categories that appear on the Land Use Diagram.

Residential Land Use

The five residential designations that appear on the Land Use Diagram combine with a set of residential development policies to create a strong foundation for preservation and maintenance of Ceres' existing healthy residential neighborhoods, improvement of other residential areas, and establishment of new residential development that follows principles that will create vital neighborhoods.

Existing and new residential areas are designated with a mix of designations. Residential Agriculture allows for ranchettes to buffer with agricultural land on the east. Very-Low Density Residential allows for larger lot housing. Low Density Residential is the primary residential category reflecting typical single family housing. Medium Density Residential and High Density Residential are found in various pockets throughout the community, and include apartments and higher density homes, for a combination of rental and ownership opportunities.

Major new residential development will occur through future areawide plans that will precisely indicate the location and mix of housing types and densities. New residential development is to occur in distinct, identifiable neighborhoods that incorporate a range of support services essential to day-to-day living, including parks, schools, and neighborhood shopping opportunities, and that encourage walking, bicycling, and transit use.

The plan also encourages the preservation and enhancement of the city's existing neighborhoods through maintenance and rehabilitation efforts and promotes continued infill development that maintains the character of existing neighborhoods.

Commercial Land Use and Development

The General Plan includes seven commercial designations which allow for commercial and office uses. Most commercial development is concentrated along the city's major corridors.

The Downtown Commercial Residential designation applies to the Downtown core area. This designation allows for a mix of retail, government offices, and entertainment use, and permits residential uses independently or as mixed uses with commercial businesses and offices, and provides for maintenance of historic downtown residential neighborhoods.

Commercial corridors are designated with Community Commercial uses, allowing for larger retail and office uses. Office uses are located throughout the community, providing for professional and administrative offices. Highway Commercial designations are located near SR 99 and along the Mitchell Road Corridor. Regional Commercial uses are designated at the area where SR 99, Mitchell Road, and Service Road meet. This area is planned for development with a pedestrian-oriented specialty retail area and larger regional commercial uses.

Other areas in the northern part of the Planning Area close to SR 99, and along Roeding Roads are designated Service Commercial, allowing for heavier commercial uses.

Neighborhood Commercial uses are intended for smaller, neighborhood-oriented shopping centers, both existing and those to be developed in new neighborhoods.

In addition, the Plan promotes continued infill development and reuse of vacant and underutilized commercial centers.

Industrial Land Use and Development

The General Plan includes three industrial designations: General Industrial, Light Industrial, and Business Park. The General Industrial designation is applied primarily in the western part of the Planning Area, allowing for a wide range of industrial uses. Light Industrial areas are also located in the western and southwestern part of the Planning Area, with smaller areas in the eastern part of the Planning Area, allowing for industrial uses with fewer impacts. Reflecting the City's desire to attract primary-wage-earner jobs, the area west of SR 99 and south of Service Road is designated for Business Park uses; another area on the northern part of Mitchell Road is also designated as Business Park.

The Plan also includes a policy section promoting economic development in Ceres.

Other

Public uses represent an important element in the overall fabric of a community. Accordingly, the Policy Document provides a framework for development of such public uses as government offices and facilities, schools, and parks and recreation facilities. In addition, the Policy Document includes land use policies and programs that recognize and reinforce the essential role that public uses (i.e., parks and schools) play in the development and maintenance of healthy neighborhoods.

Urban areas of adjacent communities (e.g., Modesto, Keyes) within the Planning Area are designated as Adjacent Urban.

Lands on the periphery are designated for Agriculture, reflecting an important open space and economic resource.

Reserve Area

Areas within the Planning Area that are not required to accommodate projected development through 2015 are designated as Residential Reserve and Industrial Reserve. The reserve designations indicate an overall intent that these areas would eventually develop with residential or industrial uses. These areas are generally located in the southwest and western parts of the Planning Area.

Substantial urban development and annexation cannot occur within the Reserve areas without a General Plan amendment.

Chapter 2: Transportation and Circulation

The General Plan addresses several transportation issues that are critical to the continued development of Ceres. The Circulation Diagram depicts the proposed circulation system to support development under the Land Use Diagram. This circulation system is represented on the diagram as a set of roadway classifications that have been developed to guide Ceres' long-range planning and programming. This chapter provides for development of an expressway system consisting of Faith Home Road with a new bridge across the river, Hatch Road, and Service Roads. The plan also includes policies for the City's major corridors to encourage continued mobility along these corridors as new development occurs.

The Plan also promotes the potential for expansion of transit systems, a bikeway system, and maintenance of goods movement (via truck and rail) and air transportation.

The overall emphasis of the policies and programs under these headings is the establishment and maintenance of a well-rounded transportation network that includes fully-connected and intersecting streets, pedestrian paths, and bike paths.

Chapter 3: Housing

The Housing Element is subject to specific statutory requirements for periodic updates. The City completed the mandatory Housing Element update and adopted a revised Housing Element in 1993. Because the City devoted extensive recent effort to updating the Housing Element, it was not revised as part of this General Plan Update.

Chapter 4: Public Facilities and Services

An important result of comprehensive planning should be the assurance that all facilities and services needed to adequately serve development will be provided in a timely fashion. While the development of detailed plans for facilities and services is beyond the purview of the General Plan, the General Plan does establish a framework for guiding planning decisions related to facility development and service provision. The general emphasis of the policies and programs in Chapter 4 of Part II is on ensuring the provision and maintenance of adequate services, while discouraging unnecessary, wasteful, or inefficient extension of existing systems or development of new facilities. Specifically, the Policy Document contains goals, policies, and programs related to water supply and delivery; wastewater collection, treatment, and disposal; stormwater drainage; solid waste collection and disposal; law enforcement; fire protection; schools; libraries; and public utilities (e.g., gas, electricity).

The policies and programs will ensure that current and future residents of and businesses in Ceres are served by a well-rounded, efficient, and environmentally-sound system of public facilities and services.

Chapter 5: Recreational and Cultural Resources

The General Plan sets the framework for an expanded park system with facilities to provide opportunities for a wide variety of recreational activities.

The goals, policies, and programs in Chapter 5 of Part II of the Policy Document articulate the City of Ceres' strong commitment to ensuring high quality recreational opportunities for Ceres residents and visitors. The Plan envisions development of new community parks and a system of neighborhood parks. In addition, the Plan promotes the development of commercial recreation activities (e.g., a golf course, arcades) in the southern part of the Planning Area.

The General Plan also sets the framework for a program to foster historic preservation efforts in Ceres and preserve important historic and archaeological resources.

Chapter 6: Agricultural and Natural Resources

Ceres' agricultural and natural resources--agricultural lands, water, vegetation, wildlife, and open space-- contribute to the city's economy and are important elements in the quality of life of Ceres' residents. These resources exist in limited quality and are at risk of destruction or degradation through continued urban development. The General Plan seeks to balance the need for growth with the need for conservation and enhancement of the area's agricultural natural resources, frequently in cooperation with other agencies. This chapter addresses preservation of the area's natural plant and animal habitats and water resources, and specifically addresses air quality concerns associated with new development.

Chapter 7: Health and Safety

This chapter contains goals, policies, programs, and standards designed to minimize the harmful effects of natural and man-made hazards. The subjects addressed include seismic and geologic hazards; flood hazards; fire hazards; crime; aircraft crash hazards; hazardous materials; and emergency response. This chapter also addresses future noise concerns in Ceres and sets noise standards for future development.

Chapter 8: Administration and Implementation

This final chapter contains goals, policies, and programs designed to ensure that the City of Ceres maintains a high level of attention to the General Plan by providing for routine review and update of the Policy Document and Background Report and ensuring that other City regulations and ordinances are consistent with the General Plan.

ADOPTION OF IMPLEMENTING ZONING

Subsequent to adopting the new General Plan, the City will revise zoning to ensure consistency with new General Plan designations.

CHANGE IN SPHERE OF INFLUENCE

Also subsequent to adopting the new General Plan and to carry out implementation program 1.3, the City will submit an application to the Stanislaus County Local Agency Formation

Commission (LAFCO) for a revision to its sphere of influence to reflect the updated General Plan.

1.7 ORGANIZATION OF THIS ENVIRONMENTAL IMPACT REPORT

The General Plan EIR addresses all requirements of CEQA. This includes a setting section briefly summarizing pertinent information concerning existing conditions and a methodology section explaining the assumptions and methodology used to identify implications and to assess impacts. This EIR assesses impacts based on the implications of the General Plan Land Use Diagram, focusing primarily on implications of estimated development within the Urban Growth Area. The discussion includes an assessment of the severity of the impact, including a conclusion as to whether impacts are considered significant according to CEQA. Impacts are characterized as "significant," "potentially significant," or "less-than-significant."

The General Plan Policy Response section references specific policies and programs contained in the General Plan Policy Document that address the implications identified in the previous part. While this discussion focuses primarily on policies and programs that respond directly to the potential negative implications of the Land Use Diagram, it also in some cases identifies policies or programs that reduce impacts that may not be considered significant.

Mitigation measures are identified that could lessen or eliminate negative impacts identified as "significant" or "potentially significant" according to CEQA standards, or, in some cases, to identify additional mitigation for impacts that are considered "less-than-significant."

1.8 PROJECT ALTERNATIVES

CEQA requires that an EIR consider alternatives to a project (Section 15126 (A)), providing sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. Following is a description of the six alternatives addressed in the DEIR, as described in Chapter 9.

1. No Project—No Development Alternative. This alternative assumes no new development in Ceres beyond what is currently built, essentially placing a moratorium on any future development with no new additional annexations. This alternative would allow for no new population or employment growth.
2. No Project—Existing General Plan Alternative. This alternative assumes the City would not adopt a new General Plan and would continue to rely on the existing General Plan. This would allow development within the existing sphere of influence, defined as Crows Landing Road on the west, Faith Home Road on the east, and the TID Lateral on the south. This would have a lower population and employment growth than under the Draft General Plan.
3. Phase 1 of Urban Growth Area. This alternative assumes development of Phase 1 of the General Plan (the existing sphere of influence), defined as Crows Landing Road on the west, Faith Home Road on the east, and the TID Lateral on the south. The area within Phase 2 would

be given Reserve designations. This would have a lower population and employment growth than under the Draft General Plan

4. Eastern Growth Alternative. This alternative assumes the City would limit future development on the west at the current city limits and would allow growth further to the east to accommodate projected population and employment growth. This alternative would accommodate essentially the same population and employment in a different land use configuration.

5. Western Growth Alternative. This alternative assumes the City would limit future development on the east at the current city limits and would grow further to the west to accommodate projected population and employment growth. This alternative would accommodate essentially the same population and employment in a different land use configuration.

6. Full Development of the Planning Area by 2015. This alternative assumes the City would provide for development of all land within the Urban Growth Area and the Reserve Areas by 2015, providing for higher population and employment growth than under the Draft General Plan.

1.9 IMPACT SUMMARY

This EIR assesses the impacts of the General Plan by considering the impacts of development according to the Land Use Diagram and the policies and programs of the Policy Document. The EIR assesses the impacts of the General Plan as a whole to reach a determination concerning the level of significance of impacts for CEQA purposes. As described earlier, the Draft General Plan and Draft EIR were prepared simultaneously in an effort to incorporate environmental mitigation into the plan. As the two documents were prepared and analyzed, policies and programs were developed to reduce environmental problems and to mitigate potential adverse impacts. This includes revisions based on the findings of the Draft EIR. For instance, as a result of the deliberations on the Draft General Plan and Draft EIR, the City decided to incorporate what had been presented as "additional mitigation" in the Draft EIR into the Policy Document as policies and programs. Accordingly, this EIR no longer proposes additional mitigation.

In the following five areas, the General Plan would have a significant impact. These are described below and summarized in Table 1-1.

TRAFFIC SERVICE LEVELS

The General Plan will provide for new residential, commercial, and industrial development to accommodate demand over the next 20 years. Development will affect the roadway system by increasing traffic volumes on existing roadways. The General Plan's level of service policy strives to maintain level of service D on major roadways and C on minor collectors and local roads.

The Circulation Diagram includes roadway improvements to meet these level of service standards in the General Plan, except for the following locations:

- Hatch Road between SR 99 and Faith Home Road: Traffic is projected to operate at LOS F along this segment. The plan includes proposals to widen the expressway to six lanes, its maximum width within the available right-of-way. The right-of-way is bounded by an irrigation canal that alternates from the north east of Central to the south west of Central and by existing development for virtually the entire segment. Additional widening of this facility would require undergrounding of the canal and/or acquisition of existing developed areas; these costs would be prohibitive and widening is therefore not considered feasible. The future service level on this roadway is considered a significant adverse impact.
- Whitmore Avenue between Blaker Road and Faith Home Road: Traffic is projected to operate at LOS E along much of this roadway segment and LOS F between Blaker Road and SR 99 and along a short stretch west of Mitchell in 2015. This east-west arterial is built to its maximum width within the existing right-of-way. Significant numbers of residential properties front this portion of Whitmore Road, and many would be quite close to the edge of a widened facility. Therefore, widening of this roadway was not considered feasible for the General Plan due to the impact on these adjacent properties. The future service levels on this roadway are considered a significant adverse impact.
- Mitchell Road between SR 99 and Hatch Road: The plan includes proposals to widen Mitchell Road to six lanes plus median through its length, including a separated one-way couplet between SR 99 and Roeding. Even with this amount of improvement, the facility is projected to operate at LOS E or F. The proposed widening is the maximum that is practical given constraints on the right-of-way. The Mitchell Road corridor is a major access point for people with origins/destinations in Modesto, and is thus as much of a regional problem as it is a problem for the City of Ceres. The proposed Faith Home expressway is seen as a partial remedy to the Mitchell Road corridor, but even with its inclusion in the General Plan, congestion is projected to remain on Mitchell Road. Ceres' contribution to the roadway service levels on this roadway is considered a significant adverse impact.
- Faith Home Road between Whitmore Avenue and Hatch Road: This one mile segment is projected to operate at Service Level E in 2015. This projection is made with a six-lane-plus median design. Since this is the only section of Faith Home that would exceed the Service Level criterion, and since it is only slightly in excess of the standard, the appropriate action would appear to be to monitor this location as development proceeds. Toward the end of the General Plan time horizon, it may be necessary to review the design of the Faith Home Road expressway in this section; however, it would appear to be premature to anticipate the need for additional right-of-way at this time. Since modeling indicates that this section would exceed LOS standards, Ceres' contribution to the roadway service levels on this roadway is considered a potentially significant impact.
- SR 99 throughout the city: This facility is included in the forecasting model as an eight-lane freeway, with four lanes in each direction, corresponding to the SAAG network for 2015 and representing a one-lane widening in each direction. Both the Ceres model and the SAAG

model indicate that demand will exceed the desired service level by the year 2015. This is primarily a regional problem, with Ceres contributing to the cumulative traffic on this facility. Ceres' contribution to the roadway service levels on this roadway is considered a significant cumulative impact.

Additional improvements to these roadways beyond that included in the Circulation Diagram were not included as part of the General Plan for the reasons outlined above; the existing rights of way were inadequate and the effects of widening would be prohibitively costly and impacts on adjacent properties were considered unacceptable.

The General Plan includes numerous policies encouraging the use of transit and other modes of transportation to reduce the impacts on roadways. In addition, as roadways are developed, specific operational improvements, such as synchronized intersections, limitations on driveway and local street access, may also improve future service levels on these roadways. There are no feasible mitigations currently available, however, that would guarantee that these service levels would be within acceptable levels.

GROUNDWATER SUPPLY

Development under the General Plan will increase demand for potable water and reduce the demand for agricultural water resulting in a net average demand increase on the groundwater supply. Because of the complexity of the groundwater basin and the lack of information regarding the long-term availability of groundwater to the City, overdraft and related water quality problems in the future are unknown, but an overall decrease in supply and system reliability is possible. Therefore, the impact of new development on the reliability of the City's municipal water supply is considered a potentially significant impact. Development under the General Plan would result in a significant, unavoidable adverse impact on the regional groundwater resource by exacerbating the existing condition of groundwater overdraft.

The long-term reliability of a domestic water supply for the City can only be determined on a regional basis. A regional groundwater study and a basin management plan would determine and address, respectively, the impacts on the City's groundwater supply. The development of a surface water supply to augment the region's groundwater supply would certainly address this reliability issue. The City continues to participate in efforts to develop a surface water supply and distribution system. Because the surface water supply issues are still undergoing discussion and cannot be guaranteed with adoption of this plan, it is not assumed that a surface supply will be available to reduce the potential impacts in the near future.

The City is currently participating in efforts that would reduce these impacts to a less-than-significant level, including joint agency planning for conjunctive use of surface and groundwaters in the Planning Area and joint agency planning in the preparation, adoption, and implementation of a groundwater management plan in accordance with the procedures outlined in AB 3030. Since these efforts will not be completed prior to adoption of the updated General Plan, however, these measures cannot be guaranteed and the impact is therefore defined as significant.

CONVERSION OF AGRICULTURAL LAND

Development of agricultural lands to urban land uses under the General Plan would allow for conversion of approximately 3,000 acres of agricultural land designated as Prime Farmland and Farmland of Statewide Importance. Development under the General Plan would, therefore, result in substantial reduction in the annual production of agricultural commodities and related employment base within the Planning Area. Conversion of these farmlands constitutes a significant adverse impact.

The only way to mitigate the conversion of prime agricultural lands would be to designate the lands for agricultural uses. The loss of prime agricultural lands is, therefore, a significant adverse impact that cannot be mitigated to a less than significant level.

AIR QUALITY

Growth in population and employment associated with development under the General Plan would result in a substantial increase in regional air pollutants. The incremental increase in regional emissions would exceed the San Joaquin Valley Unified Air Pollution Control District thresholds of significance.

General Plan policies comprise a comprehensive strategy for reducing the air quality impacts of development and transportation systems. Application of all air quality policies would reduce the impact of future development in Ceres, but not to a less-than-significant level. Impacts on regional air quality would remain significant and unavoidable even after implementation of all General Plan air quality policies.

The General Plan policies address reduction of air pollutant emissions in a variety of strategies related to land use and transportation. As a result of deliberation on the Draft Policy Document and consideration of the Draft EIR, the City incorporated a policy to encourage inclusion of exterior electrical outlets and natural gas hookups in new residential development. This will allow use of electric, rather than gas-powered equipment and encourage use of natural gas fired barbecues. Even with addition of this policy, the impact would remain significant and unavoidable.

NOISE

There is potential for existing noise-sensitive uses which currently are not exposed to unacceptable traffic noise levels to experience increased traffic noise levels, in excess of General Plan standards, due to development under the General Plan.

It is also anticipated that roadway improvement projects will be required to accommodate development under the General Plan. Existing uses may be exposed to increased noise levels associated with roadway improvement projects as a result of increased roadway capacity and increases in travel speeds. It may not be practical to reduce traffic noise levels due to roadway improvement projects to a less-than-significant level.

The only mitigation measures available to reduce the impacts of increased noise levels on existing noise-sensitive uses would be to retrofit existing noise-sensitive uses with noise-reducing devices (e.g., soundwalls, double-paned windows), as suggested by General Plan policies. The extent to which such retrofits could reduce noise levels is unknown, and funding sources for such retrofits are unknown. This mitigation is probably not practical on a large-scale basis, but could be used selectively in specific instances.

TABLE 1-1

SUMMARY OF SIGNIFICANT IMPACTS, MITIGATION MEASURES,
AND MITIGATING ALTERNATIVES

Impact Mitigating Policies and Programs	Alternatives that Would Reduce Severity of Impact
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Traffic Service Levels

- Hatch Road between SR 99 and Faith Home Road (LOS F)
- Whitmore Avenue between Blaker Road and Faith Home Road (LOS E/F)
- Mitchell Road between SR 99 and Hatch Road (LOS E/F)
- Faith Home Road between Whitmore Avenue and Hatch Road (LOS E)
- SR 99 throughout the city (LOS D/E/F) Policies 2.A.1-2.A.8

Policies 2.B.1-2.B.2

Policies 1.D.2, 1.D.4

Programs 2.1-2.4 No Project—No Development

No Project—Existing General Plan

Phase 1 of Urban Growth Area

Groundwater Resources/Supply

- Development will increase demand for potable water and reduce the demand for agricultural water resulting in a net average demand increase on the groundwater supply. Potential overdraft and related water quality problems in the future are unknown, but an overall decrease in supply and system reliability is possible. Development would exacerbate the existing condition of groundwater overdraft. Policies 4.C.1-4.C.6

Programs 4.5 and 4.6

Policies 6.B.1-6.B.5 No Project—No Development

No Project—Existing General Plan

Phase 1 of Urban Growth Area

Conversion of Agricultural Land

- Loss of 3,000 acres of Prime Farmland and Farmland of Statewide Importance
Policies 6.A.1-6.A.6 No Project—No Development

No Project—Existing General Plan

Phase 1 of Urban Growth Area

Air Quality

- Growth in population and associated employment would result in a substantial increase in regional air pollutants. The incremental increase in regional emissions would exceed the San Joaquin Valley Unified Air Pollution Control District thresholds of significance. Appendix B of General Plan Policy Document No Project—No Development

No Project—Existing General Plan

Phase 1 of Urban Growth Area

Noise

- Increased traffic volumes could result in existing noise sensitive uses being exposed to higher noise levels, in excess of General Plan standards Policies 7.I.1-7.I.8

Policies 7.J.1-7.J.2 No Project—No Development

No Project—Existing General Plan

Phase 1 of Urban Growth Area

1.10 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123 of the CEQA Guidelines require an EIR to summarize areas of controversy known to the Lead Agency including issues raised by agencies and the public and issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects.

AREAS OF CONTROVERSY

The Draft EIR identified the following areas of controversy:

- Choice of alternative
- Conversion of agricultural land
- Future water supply and usage
- Amount of future growth
- Rate of future growth
- Future traffic levels
- Future park standards
- Funding for future facilities and services

RESOLUTION OF ISSUES

During the course of preparing, reviewing, and deliberating on the Draft General Plan and considering the Draft EIR, the City resolved several of the controversial issues listed above. The process of resolving these issues consisted of making policy decisions that necessarily involved choosing among potentially competing interests and values. In doing so, the City weighed several factors (i.e., demand for growth, economic development, environmental protection) and balanced the needs associated with these factors. The result is the set of policies and programs included in the Policy Document. While the final policies and programs may not optimize the needs of all interests represented in the community or eliminate all of the controversial issues raised during the General Plan Update, they do reflect a balanced approach to guiding future development in the Planning Area.

CHAPTER 2

ASSUMPTIONS AND DEVELOPMENT ESTIMATES

This chapter summarizes estimated development potential under the General Plan and the assumptions upon which these estimates are based. The chapter presents estimates of development levels. These estimates provide the basis for much of the impact assessment in the rest of this report.

2.1 GEOGRAPHIC BASIS FOR ANALYSIS

As described in Chapter 1, the Land Use Diagram designates land uses for the entire Planning Area. The Planning Area is bounded on the north by the Tuolumne River, on the east by Washington Road, on the south by Grayson Road, and on the west by Carpenter Road. This area includes the City of Ceres' Urban Growth Area, part of Modesto's sphere of influence and the northernmost part of the unincorporated community of Keyes, and areas designated as Residential and Industrial Reserve to be considered for future development as part of Ceres beyond the time frame of the General Plan. The remaining areas are designated for agricultural and open space uses.

This chapter quantifies existing and new growth and development that would be accommodated by the General Plan in terms of housing stock, population, and commercial and industrial development and employment. Projections of future growth and development are based on the application of development assumptions to the land use designations shown on the Land Use Diagram. Total acreage within each land use designation in the Planning Area is shown in Table 2-1.

The assumptions used for assessing impacts for the various subareas of the Planning Area are described below.

URBAN GROWTH AREA

The Urban Growth Area includes all land envisioned for development as part of Ceres through the year 2015. This area is further divided into two phases of development to ensure orderly development and prevent premature conversion of agricultural lands. The first phase includes approximately 6,150 acres of land, intended to be developed first. The second phase encompasses another 1,500 acres, to be developed after the first phase is close to full development. The focus of the analysis in this EIR is based on estimates of development of all vacant and underutilized lands in the Urban Growth Area.

ADJACENT URBAN AREAS

The General Plan designates 1,830 acres as Adjacent Urban (AU). Most of the Adjacent Urban area is designated in the northwestern part of the Planning Area and includes territory within the city of Modesto and unincorporated areas within Modesto's sphere of influence, including

existing development and vacant land. A smaller area on the southeast includes the northernmost part of the unincorporated community of Keyes which is developed. These areas are not contemplated as a future part of Ceres and will continue to be under the jurisdiction of the city of Modesto or Stanislaus County. Future development of land within Modesto's sphere of influence is not specifically addressed in this EIR as this assessment was made in connection with the EIR on the City of Modesto's General Plan Update. The traffic analysis, however, is based upon regional growth in the county and assumes growth in this part of the Planning Area.

TABLE 2-1

SUMMARY OF TOTAL ACREAGE BY LAND USE DESIGNATION
LAND USE DESIGNATION URBAN GROWTH AREA TOTAL
PLANNING AREA

	Phase 1		Phase 2		Total					
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Residential										
Residential Agriculture (RA)	0.0	0.0%	135.0	9.0%	135.0	1.8%	135.0	0.9%		
Very Low Density Residential (VLDR)			515.0	8.4%	445.0	29.5%	960.0	12.5%	960.0	6.5%
Low Density Residential (LDR)			2,440.0		39.6%	225.0	14.9%	2,665.0		34.8%
	2,665.0		18.2%							
Medium Density Residential (MDR)	554.0	9.0%	20.0	1.3%	574.0	7.5%	574.0	3.9%		
High Density Residential (HDR)	226.0	3.7%	5.0	0.3%	231.0	3.0%	231.0	1.6%		
Subtotal Residential	3,735.0		60.7%	830.0	55.0%	4,565.0		59.6%	4,565.0	31.1%
Commercial/Office										
Neighborhood Commercial (NC)			52.4	0.9%	13.1	0.9%	65.5	0.9%	65.5	0.4%
Community Commercial (CC)			252.9	4.1%	8.0	0.5%	260.9	3.4%	260.9	1.8%
Downtown Comm. Res (DCR)			22.7	0.4%	0.0	0.0%	22.7	0.3%	22.7	0.2%
Service Commercial (SC)	161.6	2.6%	10.0	0.7%	171.6	2.2%	171.6	1.2%		
Highway Commercial (HC)	82.0	1.3%	18.0	1.2%	100.0	1.3%	100.0	0.7%		
Regional Commercial (RC)	111.0	1.8%	0.0	0.0%	111.0	1.4%	111.0	0.8%		
Office (O)	31.4	0.5%	35.5	2.4%	66.9	0.9%	66.9	0.5%		
Subtotal Commercial/Office	714.0	11.6%	84.6	5.6%	798.6	10.4%	798.6	5.4%		
Industrial/Business Park										
Business Park (BP)	110.8	1.8%	0.0	0.0%	110.8	1.4%	110.8	0.8%		
Light Industrial (LI)	243.8	4.0%	248.5	16.5%	492.3	6.4%	492.3	3.4%		
General Industrial (GI)			486.4	7.9%	0.0	0.0%	486.4	6.3%	486.4	3.3%
Subtotal Industrial	841.0	13.7%	248.5	16.5%	1,089.5		14.2%	1,089.5		7.4%
Public/Recreational										
Community Facilities (CF)	578.7	9.4%	220.3	14.6%	799.0	10.4%	799.0	5.4%		
Parks (P)	208.8	3.4%	54.5	3.6%	263.3	3.4%	263.3	1.8%		

Commercial Recreation (CR)	77.3	1.3%	70.0	4.6%	147.3	1.9%	147.3	1.0%
Subtotal Public/Recreational	864.8	14.1%	344.8	22.9%	1,209.6		15.8%	1,209.6
	8.2%							

Adjacent Urban

Adjacent Urban (AU)					1,833.0		12.5%
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Reserve Areas

Residential Reserve (RR)					968.0	6.6%
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Industrial Reserve (IR)					575.0	3.9%
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Subtotal Reserve Areas					1,543.0	10.5%
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Agriculture

Agriculture (A)					3,630.0	24.7%
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TOTAL	6,154.8	100.0%	1,507.9	100.0%	7,662.7
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100.0%	14,668.7	100.0%
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RESERVE AREAS

The Planning Area also includes approximately 1,550 acres designated for Residential and Industrial Reserve, intended for future planning and consideration for development after 2015. Areas designated as Residential Reserve or Industrial Reserve are assumed to remain in agricultural use or existing urban uses and under the jurisdiction of Stanislaus County through the time frame of the General Plan (2015). No development can occur within the Reserve areas without a General Plan amendment. Following completion of a study considering the development potential of this area, the City would prepare an EIR specifically addressing the impacts of any proposed development in this area. Because this area is not contemplated for development for 20 years, specific impacts of development of Reserve areas are not assessed in this EIR. For the purposes of infrastructure planning, however, the Plan provides for adequate rights-of-way and trunk line capacity to allow for ultimate development of the Reserve areas.

AGRICULTURAL AREAS

The remaining 3,630 acres within the Planning Area are designated for Agricultural uses, to remain in agricultural use and under the jurisdiction of Stanislaus County. No development of agricultural areas is assumed for the purposes of this EIR.

2.2 BASELINE AND ASSUMPTIONS FOR ASSESSING IMPACTS

As part of the General Plan Update process, the City compiled a parcel-based land use inventory for the entire Planning Area, reflecting baseline conditions as of February 1993. The inventory is derived primarily from County Assessor's records, but has been supplemented by City staff based on limited field research and information from Ceres, Modesto, and Stanislaus County. The City's consultants have used this information to tabulate data on existing land uses and vacant and underutilized land within the Planning Area. It should be noted that the net acreage totals reflect the amount of parcelized (i.e., subdivided) land; it does not include street and roadway rights-of-way or canals.

The Planning Area covers a total area of approximately 14,700 net acres, of which 22 percent is within Ceres' city limits (as of 1994), 5 percent is in Modesto's city limits, and 73 percent is unincorporated. According to the inventory, in 1993 the Planning Area contained approximately 16,350 dwelling units, 60 percent of which were within Ceres' city limits, while 8.5 percent and 31 percent were in Modesto and the unincorporated area, respectively.

The analysis in this EIR assumes development of all land within the Urban Growth Area that is vacant and underutilized as of February 1993. In other words, the holding capacity of the Urban Growth Area is the total population, housing, and employment that could theoretically be accommodated by the designations on the Land Use Diagram within the Urban Growth Area. Holding capacity was calculated based on the location, types, and densities/intensities of development permitted by the land use designations on the Land Use Diagram. Holding capacity essentially reflects development of all vacant and underutilized land designated for urban development, and assumes that other existing development will not significantly change in use or intensity during the time frame of the plan.

This holding capacity reflects a “credible, worst-case scenario” for buildout of the Urban Growth Area. The calculations are based on development of all vacant and underutilized land based on assumptions for residential densities and building intensities that are somewhat lower than the maximum intensities legally possible under the General Plan. These assumed averages are based on realistic estimates of average development densities and intensities. Using the maximum legal densities and intensities would likely result in an overstatement of likely development potential and in turn, lead to such problems as oversizing infrastructure and underfunding infrastructure improvements.

VACANT AND UNDERUTILIZED LAND ESTIMATES

The General Plan defines 23 residential, commercial, industrial, agricultural and other land use designations to depict the types of development that will be allowed in the different geographic areas of the Planning Area. To determine the holding capacity of planned land uses within the Urban Growth Area, Mintier & Associates calculated the total vacant and underutilized land within the Urban Growth Area. Totals of vacant and underutilized land within the Urban Growth Area are summarized in Table 2-2.

DENSITY/INTENSITY ASSUMPTIONS

Mintier & Associates calculated population and employment development potential by applying factors for the assumed residential density or use intensity to the amount of vacant and underutilized acreage within each designation. As described previously, the factors reflect adjustments based on historic experience that indicates most land will not develop at its maximum allowed intensity because of market forces, parcel-specific site constraints, regulatory constraints (e.g., zoning), and other factors. The development densities and intensities reflected in these factors are, therefore, lower than those maximum standards for the land use designations defined in the Policy Document.

These adjustments result in development estimates that are more realistic than estimates based on maximum permitted development intensity. Table 2-3 lists the maximum allowable density/intensity for each land use designation and the assumed average density/intensity applied to calculate development potential.

Development estimates were based on the land use designations of the Land Use Diagram. The following general assumptions concerning residential density, population density, and building intensity were used in calculating of development potential under the General Plan. For each land use designation, the Policy Document specifies either a range of residential densities or a maximum floor area ratio (FAR).

Residential Uses

Standards of building intensity for residential uses are stated as the allowable range of dwelling units per gross acre. Gross acreage includes all land (including streets and rights-of-way) designated for a particular residential use, while net acreage excludes streets and rights-of-way.

In urban areas, net acreage is normally 20 to 25 percent less than gross acreage. In rural areas and open space areas, the difference between net and gross can be as low as five percent. Net acreage is the standard more often used in zoning, while gross acreage is more commonly used in general plan designations.

Standards of population density for residential uses can be derived by multiplying the maximum allowable number of dwelling units per gross acre by the average number of persons per dwelling unit assumed for the applicable residential designation. Typically, household sizes are larger in single-family homes than in multiple-family units, therefore assumed household sizes vary according to the type and density of housing allowed in each residential designation.

The assumed average number of persons per dwelling unit for each residential designation is based on population and housing unit estimates of the California Department of Finance. To estimate population holding capacity, all areas were assumed to have a five percent residential vacancy rate. The number of occupied housing units was then multiplied by an assumed number of persons per household that varies by housing type. These estimates are described in the following section.

TABLE 2-2

DEVELOPED AND VACANT/UNDERUTILIZED LAND BY LAND USE DESIGNATION

LAND USE DESIGNATION	Within Phase 1 (Acres)					Within Phase 2 (Acres)				Total
Planning Area (Acres)										
Developed	Vacant or									
Underutilized. Total	Developed	Vacant or			Developed	Vacant or				
Underutilized Total	Developed	Vacant or			Developed	Vacant or				
Underutilized Total										
URBAN GROWTH AREA										
Residential										
Residential Agricultural (RA)	0.0	0.0	0.0	0.0	135.0	135.0	0.0	135.0	135.0	
Very Low Density Residential (VLDR)			142.0	373.0	515.0	21.0	424.0	445.0	163.0	
	797.0	960.0								
Low Density Residential (LDR)			1,271.0		1,169.0		2,440.0		8.0	217.0
	225.0	1,279.0		1,386.0		2,665.0				
Medium Density Residential (MDR)	339.0	215.0	554.0	0.0	20.0	20.0	339.0	235.0		
	574.0									
High Density Residential (HDR)		134.0	92.0	226.0	0.0	5.0	5.0	134.0	97.0	
	231.0									
Subtotal Residential	1,886.0		1,849.0		3,735.0	29.0	801.0	830.0	1,915.0	
	2,650.0	4,565.0								
Commercial/Office										
Neighborhood Commercial (NC)		15.0	37.4	52.4	0.0	13.1	13.1	15.0	50.5	
	65.5									
Community Commercial (CC)		131.9	121.0	252.9	4.0	4.0	8.0	135.9	125.0	
	260.9									
Downtown Commercial/Res (DCR)	20.1	2.6	22.7	0.0	0.0	0.0	20.1	2.6		
	22.7									
Service Commercial (SC)	118.4	43.3	161.6	0.0	10.0	10.0	118.4	53.3	171.6	
Highway Commercial (HC)	34.0	48.0	82.0	0.0	18.0	18.0	34.0	66.0	100.0	
Regional Commercial (RC)	15.6	95.4	111.0	0.0	0.0	0.0	15.6	95.4	111.0	
Office (O)	6.1	25.3	31.4	2.0	33.5	35.5	8.1	58.8	66.9	
Subtotal Commercial/Office	340.9	373.0	713.9	6.0	78.6	84.6	346.9	451.6	798.5	
Industrial/Business Park										
Business Park (BP)	1.5	109.3	110.8	0.0	0.0	0.0	1.5	109.3	110.8	
Light Industrial (LI)	59.7	184.1	243.8	39.4	209.1	248.5	99.1	393.2	492.3	
General Industrial (GI)		268.9	217.5	486.4	0.0	0.0	0.0	268.9	217.5	486.4
Subtotal Industrial	330.1	510.9	841.0	39.4	209.1	248.5	369.5	720.0	1,089.5	
Public/Recreational										
Community Facilities (CF)	371.1	207.6	578.7	150.7	69.6	220.3	521.8	277.2	799.0	
Parks (P)	78.1	130.7	208.8	0.0	54.5	54.5	78.1	185.2	263.3	
Commercial Recreation (CR)	64.1	13.2	77.3	0.0	70.0	70.0	64.1	83.2	147.3	
Subtotal Public/Recreational	513.3	351.5	864.8	150.7	194.1	344.8	664.0	545.6	1,209.6	

TOTAL, URBAN GROWTH AREA

3,070.3

3,084.4

6,154.7

225.1

1,282.8

1,507.9

3,295.5

4,367.2

7,662.7

OTHER PLANNING AREA*

Residential Reserve (RR)	968.0
--------------------------	-------

Industrial Reserve (IR)	575.0
-------------------------	-------

Adjacent Urban (AU)	1,833.0
---------------------	---------

Agriculture (A)	3,630.0
-----------------	---------

Subtotal, Other	7,006.0
-----------------	---------

GRAND TOTAL

3,070.3

3,084.4

6,154.7

225.1

1,282.8

1,507.9

3,295.5

4,367.2

14,668.7

*No estimates of vacant land have been made for areas outside the Urban Growth Area

Non-Residential Uses

Standards of building intensity for the non-residential designations in the General Plan are stated as maximum floor-area ratios (FARs). A floor-area ratio is the ratio of the gross building square footage on a lot to the net square footage of the lot.

For example, on a lot with 10,000 square feet of land area, a FAR of 1.00 will allow 10,000 square feet of gross building floor area to be built, regardless of the number of stories in the building (e.g., 5,000 square feet per floor on two floors or 10,000 square feet on one floor). On the same lot, a FAR of 0.50 would allow 5,000 square feet of floor area and FAR of 0.25 would allow 2,500 square feet. The diagram illustrates how buildings of one, two, and four stories could be developed on a given lot with a FAR of 1.00.

Summary

The development potential assumptions (i.e., dwelling units per acre, FAR) used in this EIR are lower than the maximum intensities specified in the General Plan Policy Document for the various land use designations. These lower assumptions are reasonable expectations, based on historical experience, for the likely intensity of actual development. These assumed residential densities and FARs have been applied to the acreage within each land use designation to develop future development estimates.

Table 2-3 summarizes the density/intensity assumptions that were used in this EIR.

TABLE 2-3

SUMMARY OF DENSITY/INTENSITY ASSUMPTIONS

By Land Use Designation

Land Use Designation Residential Densities

(DUs per gross acre) Nonresidential Building Intensities

General Plan

Density Range Assumed Average Density* General Plan

Maximum FAR Assumed Average FAR*

RESIDENTIAL

Residential Agriculture (RA)	0.2 - 0.5	0.5	
Very Low Density Residential (VLDR)		1.0 - 5.0	4.0
Low Density Residential (LDR)	5.0 - 7.0	6.0	
Medium Density Residential (MDR)	7.0 - 15.0	10.0	
High Density Residential (HDR)	15.0-25.0	18.0	

COMMERCIAL

Office (O)	15.0-25.0	18.0	0.5 FAR	0.35	
Neighborhood Commercial (NC)				0.5 FAR	0.25
Community Commercial (CC)				0.5 FAR	0.25
Highway Commercial (HC)			0.5 FAR	0.25	
Service Commercial (SC)			0.5 FAR	0.25	
Regional Commercial (RC)			0.5 FAR	0.25	
Downtown Comm Res (DCR)	15.0-25.0	18.0	3.0 FAR		0.75

INDUSTRIAL

Business Park (BP)	0.4 FAR	0.30	
Light Industrial (LI)	0.5 FAR	0.40	
General Industrial (GI)	0.65 FAR	0.40	

OTHER

Commercial Recreation (CR)	1.0-6.0	0.20 FAR	
Community Facilities (CF)		0.50 FAR	
Schools (S)	0.50 FAR		
Parks (P)	0.10 FAR		

Adjacent Urban (AU) Refer to Modesto or County standards, as applicable

Agriculture (A) 10 ac minimum 0.10 FAR

RESERVE

Residential Reserve (RR)	Not applicable/ no development assumed without GP amendment		
Industrial Reserve (IR)	Not applicable/ no development assumed without GP amendment		

* Assumed density and intensity for analytical purposes only (e.g., for calculating holding capacity and assessing impacts)

2.3 RESIDENTIAL DEVELOPMENT ESTIMATES

The total number of additional dwelling units and population that could be accommodated by the General Plan was calculated by applying the assumed average density for each residential land use designation to the vacant residential land. Population was derived by assuming an overall five percent housing vacancy rate and then by applying assumed average household size for each land use designation. The assumptions for each residential land use designation are summarized in Table 2-4.

TABLE 2-4

SUMMARY OF HOUSING AND POPULATION ASSUMPTIONS

By Land Use Designation

Land Use Designation	Assumed Average Density (DUs/Gross Acre)	Assumed Vacancy Rate	Assumed Population Per Household
Residential Agriculture (RA)	0.5	5%	3.20
Very Low Density Residential (VLDR)	4.0	5%	3.20
Low Density Residential (LDR)	6.0	5%	3.20
Medium Density Residential (MDR)	10.0	5%	2.75
High Density Residential (HDR)	18.0	5%	2.50
Office (O)	18.0*	5%	2.50

*20% of land designated for office development is assumed to be developed with high density residential development

These multipliers were then applied to the vacant and underutilized land designated for residential development within the Urban Growth Area. Table 2-5 shows the new housing and population that could be accommodated in the Urban Growth Area.

TABLE 2-5

SUMMARY OF NEW DWELLING UNIT (DU) AND POPULATION ESTIMATES

By Land Use Designation

LAND USE DESIGNATION	PHASE 1	PHASE 2	TOTAL URBAN GROWTH AREA						
Vacant									
Land (Acres)* DUs									
Pop Vacant									
Land (Acres)* DUs									
Pop Vacant									
Land (Acres)* DUs									
Pop									
Residential Agricultural (RA)	0.0 0	0	135.0 68	205	135.0 68	205			
Very Low Density Residential (VLDR)		373.0 1,492	4,536	445.0 1,780	5,411	818.0			
	3,272 9,947								

Low Density Residential (LDR)	1,169.0	7,014	21,323	225.0	1,350	4,104	1,394.0
8,364	25,427						
Medium Density Residential (MDR)	215.0	2,150	5,617	20.0	200	523	2,350
6,139							
High Density Residential (HDR)	92.0	1,656	3,933	5.0	90	214	1,746
4,147							
Office (O)**	25.0	90	214	35.5	128	304	60.5
							218
							517
TOTAL	1,874.0	12,402	35,622	866	3,615	10,760	2,740
							16,017
							46,382

*Land that is vacant, underutilized, or in agricultural production and designated for residential development

**20% of land designated for office development is assumed to develop with high density residential

2.4 NONRESIDENTIAL DEVELOPMENT ESTIMATES

Assessment of future nonresidential development was based on new commercial and industrial square footage and employment that could be accommodated within the Urban Growth Area, and the impacts of new parks and recreational facilities, schools, and other community facilities.

COMMERCIAL AND INDUSTRIAL DEVELOPMENT

The total number of additional square footage of new commercial and industrial development and employment that could be accommodated by the General Plan was calculated by applying the assumed average intensity for each nonresidential land use designation to the vacant and underutilized nonresidential land. Employment was derived by assuming an average vacancy rate and then by applying assumed employee space requirements for each land use designation. The assumptions for each nonresidential land use designation are summarized in Table 2-6.

TABLE 2-6

CITY OF CERES GENERAL PLAN SUMMARY OF HOUSING AND POPULATION ASSUMPTIONS By Land Use Designation

Land Use Designation Assumed Average Intensity (FAR) Assumed Vacancy Rate
Assumed Avg. Sq. Ft. per Employee

Commercial

Office (O)*	0.35	7%	350
Neighborhood Commercial (NC)	0.25	7%	500
Community Commercial (CC)	0.25	7%	500
Highway Commercial (HC)	0.25	7%	500
Service Commercial (SC)	0.25	7%	600
Regional Commercial (RC)	0.25	7%	500
Downtown Comm Res (DCR)	0.75	7%	500

Industrial

Business Park (BP)	0.30	10%	400
Light Industrial (LI)	0.40	10%	800
General Industrial (GI)	0.40	10%	800

*80% of land designated for office development is assumed to be developed with offices; the remaining 20% is assumed to be developed with high density residential development

These multipliers were then applied to the vacant and underutilized land designated for nonresidential development within the Urban Growth Area. Table 2-7 shows the new square footage and employment that could be accommodated in the Urban Growth Area.

TABLE 2--7

SUMMARY OF NEW NON-RESIDENTIAL DEVELOPMENT AND EMPLOYMENT
ESTIMATES

By Land Use Designation

LAND USE DESIGNATION		PHASE 1			PHASE 2			TOTAL URBAN		
GROWTH AREA		Vacant Land (Acres)* Sq Ft			Vacant Land (Acres)* Sq Ft			Vacant Land		
		(Acres)*	Sq Ft	Emp	(Acres)*	Sq Ft	Emp	(Acres)*	Sq Ft	Emp
Commercial/Office										
Neighborhood Commercial (NC)		37.4	407,286	758	13.1	142,659	265			
50.5		549,945	1,023							
Community Commercial (CC)		121.0	1,317,690	2,451	4.0	43,560	81	125.0		
1,361,250		2,532								
Downtown Commercial/Res (DCR)		2.6	84,942	158	0.0	0	0	2.6	84,942	158
Service Commercial (SC)		43.3	471,537	731	10.0	108,900	169	53.3		
580,437		900								
Highway Commercial (HC)		48.0	522,720	972	18.0	196,020	365	66.0		
718,740		1,337								
Regional Commercial (RC)		95.4	1,038,906	1,932	0.0	0	0	95.4		
1,038,906		1,932								
Office (O)**		25.3	308,579	820	33.5	408,593	1,086	58.8	717,172	
1,906										
Subtotal Commercial/Office		373.0	4,151,660	7,822	78.6	899,732	1,965	451.6		
5,051,392		9,787								
Industrial/Business Park										
Business Park (BP)		109.3	1,428,202	3,321	0.0	0	0	109.3	1,428,202	3,321
Light Industrial (LI)		184.1	3,208,455	3,730	209.1	3,643,358	4,235	393.2		
6,851,814		7,965								
General Industrial (GI)		217.5	3,789,546	4,405	0.0	0	0	217.5		
3,789,546		4,405								
Subtotal Industrial		510.9	8,426,203	11,456	209.1	3,643,358	4,235	720.0		
12,069,561		15,691								
TOTAL		883.9	12,577,863	19,278	287.7	4,543,090	6,201	1,171.6		
17,120,953		25,478								

*Land that is vacant, underutilized, or in agricultural production and designated for residential development

**80% of land designated for office development is assumed to develop with offices; the remainder with high density residential

OTHER NONRESIDENTIAL DEVELOPMENT

Other nonresidential development was assessed based on other factors. Schools, parks and recreation facilities, and community facilities are addressed specifically.

Schools

General locations for new elementary schools are shown on the Land Use Diagram. These locations were determined based on expected students to be generated by projected new housing development. The precise locations of new schools will be determined in connection with new development and decisions by the School District.

Parks and Recreation Facilities

Similarly, general locations for new neighborhood parks are shown on the Land Use Diagram. These locations were determined based on parkland requirements of the General Plan. The precise locations of new parks will be determined in connection with new development and decisions by the City.

In addition, the General Plan designates 180 acres of currently undeveloped land south of Service Road and west of SR 99 for new Commercial Recreation. This is intended for future development with recreational uses such as golf courses, miniature golf courses, or other sports complexes.

Community Facilities

Other community facilities will also be required in connection with new development. General locations of future fire stations are shown in Chapter 5, Public Facilities and Services.

One major community facility is the County Social Services Facility and Jail on Crows Landing Road. This is assumed to accommodate 1,500 employees in 2015, the time frame of the General Plan.

2.5 RESERVE AREAS

As previously described, development of areas designated for Residential Reserve and Industrial Reserve is not assumed within the time frame of the General Plan (2015). However, general estimates of the holding capacity of these areas were made in order to provide for adequate rights-of-way and major infrastructure capacity to reserve the possibility to serve these areas when they are needed for development beyond the year 2015. For the purposes of estimating the capacity, the following factors were used to derive dwelling units, population, and employment.

Residential Reserve: 5.2 dwelling units per gross acre

5 percent housing vacancy

3.0 population per household

Industrial Reserve: 0.40 Floor Area Ratio

10 percent vacancy

800 square feet per employee

The general estimates of the housing, population, and employment of the Reserve area are shown in Table 2-8.

TABLE 2-8

SUMMARY OF DEVELOPMENT POTENTIAL OF RESERVE AREAS

	Acres	Dwelling Units	Population	Employment
Urban Growth Area				
Existing (1994)				
Ceres city limits	3,000	9,850	29,700	
Unincorporated areas	5,200	5,100	8,400	
Total, Existing (1993)	8,200	14,950	38,100	8,000
Additional, Urban Growth Area			16,017	46,382
Total Holding Capacity in 2015	8,200	30,967	84,483	35,000
Reserve Areas				
Residential Reserve	968	5,034	14,346	
Industrial Reserve	575		11,271	
Total Reserve	1,543	5,034	14,346	11,271
Total, Urban Growth Area and Reserve Areas			9,743	40,681

*Total from Table 2-7 plus 1,500 employees at County Social Services Facility (designated CF)

CHAPTER 3

LAND USE, HOUSING, AND POPULATION

This chapter discusses potential impacts of the General Plan associated with land use, housing, and population (including jobs/housing balance).

3.1 URBAN LAND USE AND LAND USE PLANS

ENVIRONMENTAL SETTING

Existing urban land characteristics are described in Chapters 1 and 2 of the General Plan Background Report and development potential estimates for the General Plan are presented in Chapter 2 of this EIR. Ceres' city limits (as of 1994) encompass about 3,580 acres. Residential uses are the predominant land use, making up over half of the land area. Industrial development, constituting about one-third of the land area in the city, is located primarily in the western part of the city. Commercial uses are found along Mitchell Road, Whitmore Avenue, and Hatch Road.

Existing Ceres General Plan

The current plan for land use in the City of Ceres is the existing General Plan, consisting of nine documents adopted over the last 20 years.

1. Open Space and Agriculture Element, adopted June 1973
2. Scenic Highway Element, adopted November 1977
3. Land Use Element, adopted November 1984, as amended through 1996
4. Noise Element, adopted June 1990
5. Safety Element, adopted September 1990
6. Public Facilities Element, adopted October 1990
7. Circulation Element, adopted December 1991
8. Housing Element, adopted August 1992
9. Mitchell Road Corridor Specific Plan, adopted June 1989, as amended through August 1995

Stanislaus County General Plan

The Stanislaus County General Plan and Zoning Ordinance regulate land use in the unincorporated Ceres Study Area. The Stanislaus County Plan was adopted in June 1987.

The Stanislaus County General Plan designates unincorporated land within Ceres' and Modesto's current spheres of influence as Urban Transition. Some smaller unincorporated areas within the Planning Area are designated Commercial, Low Density Residential, Medium Density Residential, and Industrial, with most of the territory designated as Agricultural.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to evaluate impacts to urban land uses that would be expected to occur in the General Plan's Urban Growth Area. Impacts are assessed quantitatively based on information contained in the Background Report and the Land Use Diagram. The amount and location of development are based on the designations of the Land Use Diagram and growth projections and location information as described in Chapter 2 of the EIR.

Assumptions

The following assumptions were made in assessing the impacts of the General Plan's Land Use Designations:

1. Development will occur consistent with the projections described in Chapter 2 of this EIR.
2. The City will adopt areawide plans in areas outside the existing city limits and annex these areas, allowing development in these areas to proceed.
3. New urban development permitted by the City of Ceres will be contained within the Urban Growth Area through the year 2015.

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project will normally have a significant effect on the environment if it will conflict with adopted environmental plans and goals of the community where it is located or if it would divide or disrupt the physical arrangement of an established community. Therefore, for the purposes of this EIR, the General Plan is assumed to have a significant impact if it would: (1) constitute a major change in land use policy for the city of Ceres or (2) divide or disrupt the physical arrangement of the community.

IMPLICATIONS OF THE LAND USE DIAGRAM

Changes to Land Use and Land Use Planning in Ceres

The General Plan is a comprehensive update of the City of Ceres' General Plan, and accordingly includes significant new policy objectives, as described in Chapter 1 of this EIR. The Housing Element is not proposed to be updated in connection with this update, and consistency with the draft plan is discussed in the next section. The Mitchell Road Specific Plan (MRSP) addresses issues specific to the Mitchell Road corridor; minor amendments to the MRSP are proposed.

The General Plan provides for a longer planning time frame than the existing general plan. As a result, it provides for a larger Urban Growth Area to accommodate that growth. Expansion of the planned area for growth is relatively balanced to the east, west, and south. Expansion to the north is not possible because of the Tuolumne River and the city of Modesto. Expansion is greatest to the west; this reflects existing development in the Crows Landing Road area and is

consistent with the industrial uses and planned expansion of the city of Modesto west of SR 99 and north of Hatch Road.

The Land Use Diagram extends the city's framework for development with the major arterials and expressways as its guiding structure. It enforces Mitchell Road, Hatch Road, and Whitmore Avenue as the city's major commercial corridors. The Land Use Diagram builds upon the direction of the Mitchell Road Specific Plan by further specifying how regional commercial uses would be accommodated at Mitchell and Service Roads; the Circulation Diagram lays out one-way couplets at the south end of Mitchell Road in order to accommodate traffic from this level of development. It provides for additional industrial development on the west side of the city, building on existing patterns of development in Modesto and unincorporated areas.

Stanislaus County General Plan

Stanislaus County is responsible for land use planning and regulation in the Planning Area outside the Ceres city limits, with the exception of territory within the city of Modesto. The City and County have agreed to allow cities to review and comment on proposed development within their spheres of influence. The Stanislaus County General Plan designates unincorporated undeveloped land within the sphere of influence as Urban Transition. Other unincorporated areas within the Planning Area are designated Commercial, Low Density Residential, Medium Density Residential, Industrial, and Agricultural.

The County's Urban Transition designation is intended to ensure that land remains in agricultural usage until urban development consistent with a city's general plan designation is approved. Generally, urban development will only occur upon annexation to a city. Development may be permitted prior to annexation provided the development is consistent with the land use designation of the general plan of the affected city.

Until Urban Transition lands within a sphere of influence are annexed, they are typically zoned General Agriculture (A-2). Planned Development (PD) zoning may also be used provided the development does not exceed the established building intensity standards. Building intensity and population density standards are the same as under the Agricultural designation.

Goal five of the Stanislaus County General Plan is to "complement the general plans of cities within the county." To this end, the General Plan contains several policies concerning development within the unincorporated portion of a city's sphere of influence. These policies do not allow development to occur in the city's sphere of influence if it is inconsistent with a city's adopted general plan. Development projects proposed for such areas, which require discretionary approval, are referred to the appropriate city to determine whether the project meets its development standards, and whether the project shall be approved. In addition to meeting the affected city's development standards, the project must also conform to any fee collection requirements for public facilities. Exceptions include agricultural and related uses and churches.

The County's Agricultural Element contains the following goal: "Preserve Our Agricultural Lands for Agricultural Uses." The Agricultural Element directs development away from the

County's most productive agricultural areas, but acknowledges that some expansion of existing cities and communities will need to occur.

Specifically, the Agricultural Element includes a policy stating:

2.8 The County recognizes the right of cities and unincorporated communities to grow and prosper and shall not oppose reasonable requests to expand spheres of influence of cities or community services districts and sanitary districts serving unincorporated communities in managing development in urban transition areas.

By expanding its sphere of influence, the General Plan would provide for the designation of urban land uses in some areas designated as Agriculture under the Stanislaus County General Plan.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies and programs address the major issues concerning land use implications:

Community Character and Identity

1.A.1. The City shall strive to preserve Ceres' traditional small-town qualities (e.g., family-oriented environment, stable neighborhoods, lack of traffic congestion, ease in traveling within the city, personal safety, community involvement), while increasing its residential and employment base.

1.A.2. The City shall strive to maintain and enhance a unique community identity. To this end, where possible, the City shall maintain physical separation from nearby communities and provide visual distinction where Ceres abuts Modesto.

1.A.3. The City, in cooperation with the County, shall seek to establish a permanent greenbelt between Ceres and Keyes. The City shall work with the County in limiting uses in this area by designating agricultural and very-low density residential land uses for this area, and shall seek long-term protection of these areas through dedication of conservation easements to agricultural land trusts and similar organizations.

1.A.4. The City shall oppose expansion of Modesto's sphere of influence south of its existing boundaries of the Tuolumne River east of the Southern Pacific Railroad tracks and Whitmore Avenue west of SR 99.

1.A.5. The City shall seek to provide visual distinction between Ceres and Modesto where the two cities abut. To this end, the City shall use signs and landscaping at entrances and along major corridors where the two communities meet.

1.A.6. The City shall create gateways to provide distinctive entrances to Ceres, particularly at key access points along the SR 99 Corridor, at the major entrances on Mitchell Road, and at transitions from Modesto and Ceres on Crows Landing Road.

1.A.7. The City shall seek to enhance the appearance of its major corridors as important structural elements in Ceres' physical identity, and as a feature to improve Ceres' image in attracting economic development.

Citywide Growth and Development

1.B.1. The City shall ensure that land is designated for development consistent with the needs of the community and to maintain a positive fiscal balance for the City.

1.B.2. The City shall promote and support the development of a healthy balance of residential, commercial, and industrial businesses within the city.

1.B.3. The City shall ensure that future development occurs in an orderly sequence based on the logical extension of public facilities and services.

1.B.4. The City shall phase future growth and development to provide for orderly growth and prevent premature conversion of agricultural lands. Two phases of growth within the Urban Growth Area are shown in Figure 1-1. Residential development will be permitted within the second phase when there is a demonstrated need for additional land and there is less than a five-year supply of appropriately-designated land available within the first phase.

1.B.5. Annexations to the city shall be approved only after City approval of an appropriate areawide plan (e.g., master plan, specific plan) that addresses land use, circulation, housing, infrastructure, and public facilities and services, based on the annexation policy included as Appendix A of the Policy Document. The various areas requiring areawide plans are shown conceptually in Figure 1-3. The requirements for areawide planning and analysis of the impact on public facilities and services may be waived by the City Council for individual projects or categories of projects where these types of studies are determined to be unnecessary or impractical due to size, scale, location, or other special circumstances associated with the application to annex to the City. In general, these would include:

- a. Existing developed areas
- b. Existing or proposed public facilities
- c. Small-scale (generally less than 10 acres) infill or island areas
- d. Small-scale (generally less than 10 acres) areas located north of Hatch Road
- e. Unique economic development opportunities that offer significant community benefits (e.g., 100 or more permanent/part-time jobs, substantial sales tax revenues)
- f. Housing projects for very-low and low-income households

1.B.6. The City shall endeavor to manage residential growth at an even and reasonable pace, so as not to exceed an overall annual average growth rate of 4.2% over the time frame of the plan. To this end, the City shall manage single-family residential growth through phasing provisions in

new residential areawide plans. Approval of new residential areawide plans shall be based on the following general guidelines.

a. Cumulative projected single-family housing growth within areawide plans should not exceed the following five-year housing growth increments.

New Housing Units by Five-year Increment

Five-Year Period 1996-

2000 2001-

2005 2006-

2010 2011-

2015

Number of Housing Units 2,805 3,335 3,173 3,787

b. Areawide plans should include phasing provisions to avoid dramatic annual growth peaks

c. Exceptions to these general guidelines may be granted by the City under the following circumstances:

i. If needed to provide for the City's fair share of regional housing needs

ii. For any portion of the proposed development that is reserved for very-low- and low-income housing (as demonstrated through rental or sales limitations)

iii. If the proposed development will provide substantial benefits to the community, including, but not limited to, the following:

1) Provides for or assists in providing for needed infrastructure expansion that could not be accomplished without adjusting the growth parameters (e.g., wastewater treatment plant expansion, new trunk line)

2) Provides for or assists in providing for development of needed public facilities that could not be accomplished without adjusting the growth parameters (e.g., high school, community park)

3) Includes unique economic development opportunities (e.g., substantial number of jobs, substantial sales tax revenues) as a component of the project.

4) Includes needed or desired community facilities (e.g., community center, golf course).

5) Provides for substantial unmet or underserved need in the community (e.g., very-low income housing).

6) Includes unique or special design or amenities that warrant special consideration.

Infill development, multi-family development, and areawide plans adopted prior to adoption of this General Plan will be exempt from the provisions of this policy.

1.B.7 The City shall promote infill development and reuse of underutilized parcels in the city, consistent with maintaining or enhancing the positive qualities of the surrounding neighborhoods.

1.B.8 The City shall oppose subdivision of properties in the unincorporated sphere of influence where such development would compromise future City development.

1.B.9 The City shall promote pedestrian, bicycle, and transit access and circulation in designating and approving new development.

1.B.10 The City shall monitor technological advances that may affect planning (e.g., advances in the use of electric cars, changes in communications systems) to take the lead in planning for changes that may affect land use.

1.B.11 The City shall require development project design to reflect and consider natural features, noise exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities, building intensities, and lot patterns will be determined by these and other factors. As a result, the maximum densities and intensities specified by General Plan designations or zoning for a given parcel of land may not be realized.

1.B.12 The City shall, providing reciprocal agreements are reached with the City of Hughson and Stanislaus County, establish a permanent urban growth boundary on the eastern boundary of the Urban Growth Area to permanently limit urban development and preserve agricultural lands east of the city. This permanent urban growth boundary will also include buffers to minimize the impacts of urban development on the immediately adjacent agricultural lands.

To establish the permanent urban growth boundary, the City shall pursue agreements with Stanislaus County and the City of Hughson to guarantee that these jurisdictions would also not ultimately allow urban development in this area. In addition, to ensure the permanence of this boundary and buffering between urban and agricultural uses, the City will investigate the use of various additional techniques to identify the most appropriate combination of techniques to ensure its long-term viability. These techniques may include, but are not limited to, the following:

- a. Large ranchette lots on the periphery (e.g., to 2-5 acre lots) with setbacks to buffer with agricultural uses.
- b. Public or private recreational uses (e.g. parks, golf courses) on the periphery to buffer with agricultural uses.
- c. Purchase of conservation easements (including the use of mitigation fees on new development to address funding for this program).
- d. Sizing of infrastructure (e.g. water and sewer mains) to accommodate only growth on the east within the Urban Growth Area, to make future expansion more difficult.
- e. Design of circulation system to make eastward extension more difficult.

f. Special provisions (i.e., a “supermajority”-- four-fifths of the City Council) to allow any amendments to the boundary.

These policies and programs seek to guide growth in an orderly pattern consistent with economic, social and environmental needs, providing for continued small-town character and preservation of surrounding agricultural lands.

IMPACTS

The General Plan designates land within an Urban Growth Area to accommodate development through the year 2015. The rate at which vacant land within the proposed Urban Growth Area is developed will largely be determined by market forces. The Urban Growth Area of the General Plan is larger than the area of planned growth in the existing general plan, but also includes a longer time frame for development. While the General Plan will allow for considerable growth over the next 20 years, it generally builds upon the existing land use framework, and includes numerous policies to preserve and enhance Ceres’ community character as it grows and provide for orderly, well-planned new development.

By expanding its sphere of influence, the General Plan would provide for the designation of urban land uses in some areas designated as Agriculture under the Stanislaus County General Plan. The Stanislaus County General Plan acknowledges that this will occur in order for its cities to continue to expand. The General Plan remains consistent with the fundamental objectives of the Stanislaus County General Plan, providing for orderly contiguous growth, prohibiting leapfrog development, and seeking to minimize impacts on adjacent farmlands.

Development under the General Plan would not disrupt or substantially alter the overall physical arrangement of the community, and is generally consistent with goals and objectives of local and regional plans. Its impact is, therefore, considered less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

3.2 HOUSING AND POPULATION

ENVIRONMENTAL SETTING

The existing housing and population characteristics of the City of Ceres are summarized in Chapter 3 of the General Plan Background Report and the 1992 Housing Element. Chapter 2 of this EIR summarizes the existing housing stock and population and projected growth under the General Plan within the Urban Growth Area.

Ceres Housing Element

Housing supply and other housing issues within the city of Ceres are discussed in detail in the Housing Element. The Housing Element was adopted August 1992. Local governments must

prepare and revise housing elements generally every five years to meet state-mandated requirements concerning housing needs. The Housing Element includes detailed background information, including the following information.

- Discussion of the special characteristics of the city's population, including the total number of households, large families, female-headed households, elderly, and other specially-identified groups
- Determination of the cost of dwelling units by tenure and vacancy status that may be affordable to Ceres residents
- Estimate of the number of low-income households by tenure paying more than 30 percent of their income for housing
- Estimate of the incidence of overcrowding
- Discussion of the condition of the housing stock and need for rehabilitation
- Evaluation of how governmental, environmental, and economic factors may constrain the development of affordable housing
- Discussion of the incidence of homelessness and available programs for the homeless in Ceres
- Discussion of the number of publicly-subsidized dwelling units that are in danger of converting to market rents when federal or state loan restrictions are removed
- The effect that anticipated job creation in Ceres and surrounding communities may have on the need for additional housing.

Based on these factors, the City assessed its existing and future housing needs within the time frame of the Housing Element (1992-1997), and includes goals, policies, and implementation programs to achieve the following broad goals.

- To designate sufficient land at appropriate densities and establish development permit procedures to accommodate the City's regional share of housing for all income groups.
- To address special housing needs as defined by state law and local needs.
- To meet a reasonable share of the city's low- and moderate-income housing needs.
- To preserve the existing housing stock and conserve existing affordable housing opportunities.
- To assure that all present and future residents have equal access to housing, commensurate with their financial capacity, without discrimination.

- To promote the preservation of historic residential buildings.
- To promote energy conservation in the construction of new housing and within the existing housing stock.

The policies and programs of the Housing Element that most significantly address land use issues are listed below.

Goal A--Land Use Designations, Densities, and Development Procedures

Policy 1: The City will maintain an adequate supply of residential land in appropriate land use designations and zoning categories to accommodate projected household growth and to meet its regional fair share of housing.

Policy 2: The City will establish flexible land use regulations through a planned development process for large tracts of land that allows for a range of housing types and densities within a single development.

Policy 3: The City will encourage the use of specific plans and development agreements on large tracts of land to improve the site planning/development process and increase the predictability of the development process.

Policy 5: The City will allow the installation of mobilehomes and factory-built housing on permanent foundations in accordance with residential design standards administered by the City. These standards will not distinguish between site-built and factory-built homes.

Policy 7: Higher density housing should be located in areas served by the full range of urban services and near existing or potential public transit routes and employment centers.

Policy 8: New residential projects should be designed to facilitate non-automobile modes of travel as described in the Circulation Element.

Policy 10: The City will promote infill residential development within the Redevelopment Area and other older parts of the city where adequate public facilities and services are already in place in small projects that can be integrated with existing neighborhoods.

Policy 11: The City will encourage a mix of housing types throughout the city in order to increase residential choices. Not every neighborhood will include every type of housing, however. The specific mix of housing for any particular neighborhood should depend on existing land uses within and surrounding the neighborhood, the environmental characteristics of undeveloped land within the neighborhood, the capacity of public facilities and services within the neighborhood, and other factors.

Goal B--Special Housing Needs

Policy 8: The City will pursue land use policies that allow small residential developments and individual housing units meeting special needs to be integrated into existing neighborhoods and new residential developments. Examples include second dwelling units, duplexes on corner lots, and scattered-site housing developments on infill lots.

Programs

Program 2: Specific Plans and Planned Developments. The City will require that large tracts of vacant land develop under a comprehensive site plan, either through a specific plan process or a planned development process, that provides for a mixture of housing types and a range of housing densities. The purpose of this requirement will be to ensure that each undeveloped area within the city's sphere of influence contains a percentage of land at various densities that correspond to the proportion of the City's regional housing needs for each income group.

Program 28: Mixed Use Developments. The City will encourage mixed commercial/housing developments through its planned development process when such a development approach can contribute to the City's balance of housing in relation to jobs or provide affordable housing for low- and moderate-income households. Encouragement of this type of development would occur primarily through a flexible regulatory approach as part of the planned development process.

The existing Housing Element addresses the City's housing production targets through the time frame of the element, which are the City's quantified objectives pursuant to State Housing law.

METHODOLOGY

Assumptions

1. New housing, population, and employment growth will occur consistent with the development estimates in Chapter 2 of this EIR.
2. The City will update the Housing Element in accordance with statutory requirements.
3. Resource and infrastructure constraints will not limit population growth to levels below those indicated in Chapter 2.
4. The development of jobs within Ceres will foster housing development in Ceres.

Thresholds of Significance

According to the State CEQA Guidelines, a project will normally have a significant impact on housing if it will affect the existing supply of housing or create a demand for more housing. The CEQA Guidelines also assume a project could have adverse impacts on population if it has the potential to substantially alter the location, distribution, density or growth rate of the population of an area.

For the purposes of this EIR, the General Plan is considered to have a significant impact if adoption or implementation of the plan would create a demand for more housing without providing for accompanying housing development or if it would be inconsistent with the City's adopted Housing Element. This EIR also considers it a significant impact if the General Plan would limit housing development substantially below forecasted growth, as it would thereby require other jurisdictions in the region to accommodate this growth.

IMPLICATIONS OF THE LAND USE DIAGRAM

Housing and Population Growth

The city of Ceres was estimated to have a population of 29,700 and a total of 9,850 housing units in 1994, with an additional 5,100 dwelling units and 8,400 population in unincorporated areas of the Urban Growth Area. The Land Use Diagram provides for new development of 16,000 units, estimated to accommodate an additional 46,400 people.

The Stanislaus Area Association of Governments (SAAG) projects that Ceres will grow to 73,200 people by the year 2015 (not factoring in the existing population within the unincorporated areas of Ceres' current sphere of influence). This therefore assumes growth of 43,500 from 1994 to 2015.

Indirect impacts of housing construction may result from increased traffic, the loss of valuable natural resources such as wildlife habitat and the conversion of agricultural land, and the increase in demand for public services and facilities. The secondary and tertiary impacts resulting from the designation of additional land for housing are discussed in the appropriate corresponding sections of this EIR.

Jobs-Housing Balance

Ceres currently has a higher ratio of employed workers than jobs in the city, which means that many of Ceres workers travel outside the city to work. The Demographic and Economic Profile published by the Stanislaus County Economic Development Commission analyzed the top ten places of work for Ceres' resident workers based on a special study of 1990 Census data. Only 16 percent worked in Ceres; the primary job destinations for Ceres' commuters were as follows: Modesto (41%), unincorporated Stanislaus County (16%), San Jose (3%), Turlock (2%), Oakdale (2%), and Stockton (1%).

The Land Use Diagram designates additional land for commercial and industrial development. Market forces will largely determine the rate at which employment growth occurs in Ceres, although the City will continue to promote economic development. Land uses designated on the Land Use Diagram provide the opportunity for Ceres to have a better jobs-housing balance and reduce commuting outside of Ceres. The Urban Growth Area could accommodate an estimated employment of 35,000, with 31,000 dwelling units.

Ultimately, market forces will be the major factor determining the level of employment growth by 2015, although City policies and actions can assist in attracting and retaining businesses. By providing for an adequate supply of commercially and industrially-designated lands in a range of locations and parcel sizes, the City seeks to provide adequate opportunity to meet the prospective needs of new commercial and industrial development. In addition, the Land Use Diagram includes land designated for Residential Reserve located near areas designated for employment development to provide the opportunity to house additional workers if and when this is needed.

Consistency with Ceres' Housing Element

The General Plan has a longer planning time frame than the Housing Element, and would therefore provide additional sites to accommodate projected housing development beyond 1997, the time frame of the Housing Element.

GENERAL PLAN POLICY RESPONSE

The General Plan, in conjunction with the adopted Housing Element, include policies and programs to offset the adverse housing-related impacts associated with the Land Use Diagram. The increase in land designated for the development of more employment-generating land uses should help stem the flow of workers out of the county, leading to a better balance between jobs and housing.

Relevant housing-related General Plan policies and programs include the following:

Citywide Growth and Development

1.B.2. The City shall promote and support the development of a healthy balance of residential, commercial, and industrial businesses within the city.

1.B.5. Annexations to the city shall be approved only after City approval of an appropriate areawide plan (e.g., master plan, specific plan) that addresses land use, circulation, housing, infrastructure, and public facilities and services, based on the annexation policy included as Appendix A of the Policy Document. The various areas requiring areawide plans are shown conceptually in Figure 1-3. The requirements for areawide planning and analysis of the impact on public facilities and services may be waived by the City Council for individual projects or categories of projects where these types of studies are determined to be unnecessary or impractical due to size, scale, location, or other special circumstances associated with the application to annex to the City. In general, these would include:

- a. Existing developed areas
- b. Existing or proposed public facilities
- c. Small-scale (generally less than 10 acres) infill or island areas
- d. Small-scale (generally less than 10 acres) areas located north of Hatch Road
- e. Unique economic development opportunities that offer significant community benefits (e.g., 100 or more permanent/part-time jobs, substantial sales tax revenues)
- f. Housing projects for very-low and low-income households

1.B.6. The City shall endeavor to manage residential growth at an even and reasonable pace, so as not to exceed an overall annual average growth rate of 4.2% over the time frame of the plan. To this end, the City shall manage single-family residential growth through phasing provisions in new residential areawide plans. Approval of new residential areawide plans shall be based on the following general guidelines.

a. Cumulative projected single-family housing growth within areawide plans should not exceed the following five-year housing growth increments.

New Housing Units by Five-year Increment

Five-Year Period	1996-2000	2001-2005	2006-2010	2011-2015
Number of Housing Units	2,805	3,335	3,173	3,787

b. Areawide plans should include phasing provisions to avoid dramatic annual growth peaks

c. Exceptions to these general guidelines may be granted by the City under the following circumstances:

i. If needed to provide for the City's fair share of regional housing needs

ii. For any portion of the proposed development that is reserved for very-low- and low-income housing (as demonstrated through rental or sales limitations)

iii. If the proposed development will provide substantial benefits to the community, including, but not limited to, the following:

1) Provides for or assists in providing for needed infrastructure expansion that could not be accomplished without adjusting the growth parameters (e.g., wastewater treatment plant expansion, new trunk line).

2) Provides for or assists in providing for development of needed public facilities that could not be accomplished without adjusting the growth parameters (e.g., high school, community park).

3) Includes unique economic development opportunities (e.g., substantial number of jobs, substantial sales tax revenues) as a component of the project.

4) Includes needed or desired community facilities (e.g., community center, golf course).

5) Provides for substantial unmet or underserved need in the community (e.g., very-low income housing).

6) Includes unique or special design or amenities that warrant special consideration.

Infill development, multi-family development, and areawide plans adopted prior to adoption of this General Plan will be exempt from the provisions of this policy.

1.B.7. The City shall promote infill development and reuse of underutilized parcels in the city, consistent with maintaining or enhancing the positive qualities of the surrounding neighborhoods.

Residential Development—General

1.C.1. The City shall support residential development at a manageable pace to achieve its fair share of regional housing needs and provide for orderly extensions of infrastructure and public services.

1.C.2. In reviewing and approving areawide plans for residential development, the City shall ensure that an adequate supply and densities of residential land is available.

1.C.3. New residential developments should be physically and socially integrated with the community. In considering proposed gated or walled residential development, the City shall review the need for these features in terms of whether they detract from the sense of integration of such development into the community.

1.C.4. The City shall reserve designated high density housing sites for high density and multi-family housing development by requiring new development to meet at least the minimum density prescribed in the High Density Residential land use designation.

1.C.5. The City shall encourage multi-family housing to be located throughout the community, especially near transportation corridors, downtown, major commercial areas and neighborhood commercial centers.

1.C.6. The City shall encourage multi-family developments that include the following features:

- a. Sufficient outdoor privacy for each unit (i.e., patios and/or decks)
- b. Covered off-street parking
- c. Parking sited off the primary access street and screened with landscaping
- d. Good site and building management and maintenance
- e. Building massing broken into smaller units, including some one-story elements
- f. Pitched and varied rooflines
- g. Functional and accessible interior site open space
- h. Recreational areas for children
- i. Attractive landscaping, including larger trees
- j. Easily identified and sheltered entrances to units
- k. Manageable number of units
- l. Screened secure and accessible areas for waste disposal and recycling

Multi-family development with the following features shall be discouraged:

- m. Flat roofs and/or small roof overhangs
- n. Large blank walls
- o. Long blocks of undifferentiated and identical units
- p. Large, single buildings

- q. Poorly-maintained sites and/or buildings
- r. Little or poor open space
- s. Monotonous color schemes or large developments without variation in building color
- t. Lack of architectural distinctiveness
- u. Highly visible, uncovered off-street parking or inadequate off-street parking

1.3 In reviewing and approving areawide plans for residential development, the City shall ensure that an adequate supply and densities of residential land is available.

1.4 The City shall monitor projected annual housing growth as part of its annual report on meeting regional housing needs.

New Residential Neighborhoods

1.D.1. The City shall encourage the creation of well-defined residential neighborhoods throughout the city, including in newly-developing areas. Each neighborhood should have a clear focal point, such as a park, school, or other open space and community facility, and shall be designed to promote pedestrian convenience. To this end, the City shall consider the form of historic neighborhoods, including emphasis on pedestrian access and circulation, and tree-lined parkways, as models for the planning and design of new residential neighborhoods. (See also Policy 2.C.2. in the “Residential Streets” section of Chapter 2)

1.D.2. Consistent with the City’s annexation policy (Appendix A), new residential development shall occur after adoption of areawide plans (i.e., master plans or specific plans). Areawide plans shall indicate the locations of various residential land uses, parks, schools, neighborhood commercial, streets, bikeways, walkways, and other infrastructure. Areawide plans shall include a mix of residential densities.

Each residential areawide plan shall at a minimum address the following:

- a. The distribution, location, and extent of land uses, including standards for land use intensity.
- b. Compatibility of new development with adjacent existing and proposed development.
- c. Provision of a range of housing types to ensure socially and economically integrated neighborhoods based on the Housing Element projections of housing needs.
- d. Distribution and location of roadways, including design standards for and the general alignment of arterial and collector streets. Specific provisions for local streets and bikeways should be shown, where necessary.
- e. Provisions for the extension of the existing city roadway system into new development areas. New development shall be linked to adjacent existing neighborhoods and planned neighborhoods.

- f. Distribution and location of and specifications for sewer, water, and drainage facilities needed to serve new development consistent with the Sewer, Water, and Drainage Master Plans, including reservations for needed wells and storage areas.
- g. Distribution and location of neighborhood commercial centers, parks, schools, and other public- and quasi-public facilities.
- h. Provisions for linking residential neighborhoods, parks, schools, shopping areas, and employment centers through a system of pedestrian and bicycle pathways.
- i. Design guidelines for all new public and private development, including landscaping, roadway frontage treatment, subdivision identification signs and monuments, and walls and fences.
- j. Provisions for development phasing to ensure orderly and contiguous development consistent with infra-structure expansions and anticipated market demand.
- k. Provisions for minimizing conflicts between new development and adjacent agricultural uses.
- l. Implementation measures necessary to carry out the plan, including a program for financing public infrastructure improvements.

1.D.3 The City shall require residential subdivisions to be designed to provide well-connected internal and external street, bicycle, and pedestrian systems.

1.D.4. The City shall promote architectural and landscape design features in new development that create more pedestrian-friendly neighborhoods, such as rear, setback, or detached garages, front porches, tree-lined streets, and landscaped strips between street and sidewalks.

Existing Residential Areas

1.E.1. The City shall seek to preserve the vital qualities of existing, stable residential neighborhoods, such as well-maintained buildings and landscaping, street trees, well-maintained streets and sidewalks, bikeways, well-located and well-maintained parks, low levels of traffic volumes and speed on residential streets, absence of graffiti, and high levels of personal safety.

1.E.2. The City shall encourage infill and reuse in existing neighborhoods that maintain or enhance the positive characteristics of the surrounding neighborhood and do not negatively affect surrounding land use.

1.E.3. The City shall continue to promote rehabilitation for single and multi-family housing in the Planning Area, encouraging funding through federal and state grants and redevelopment agency programs.

1.E.4. The City shall promote street tree planting and maintenance in existing residential neighborhoods.

1.E.5. The City shall provide assistance and/or encouragement to community service and non-profit organizations to assist seniors and lower income households with housing and landscape maintenance.

1.E.6. The City shall continue to enforce the City property maintenance ordinance to address property and buildings that become eyesores or present health and safety problems.

IMPACTS

The General Plan provides land in a range of residential densities to accommodate projected housing demand and population growth through 2015. The General Plan is consistent with and builds upon the adopted Housing Element and provides the opportunity for a better balance of jobs to housing. The housing and population-related impacts of the General Plan are, therefore, considered less-than-significant.

Among the indirect effects associated with housing and population growth are conversion of agricultural land for urban development, increased traffic with associated air quality impacts, and increased demand for public services and facilities. These indirect effects are discussed in subsequent chapters of the EIR.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the General Plan and the Housing Element are necessary.

CHAPTER 4

TRANSPORTATION AND CIRCULATION

This chapter focuses primarily on the impacts of growth on the City of Ceres' street and highway system. It also discusses transit services and facilities, non-motorized transportation, goods movement and air transportation, all of which constitute small but important components of the transportation system.

4.1 STREET AND ROADWAY SYSTEM

ENVIRONMENTAL SETTING

Chapter 5 of the General Plan Background Report describes the existing street and roadway system and conditions. Ceres is served by a hierarchical system of freeways, expressways, arterial streets, collector streets and local streets, each of which serves a specific function in the overall circulation plan.

The main north-south arterials currently serving Ceres include Crows Landing Road, South 9th Street, and Mitchell Road. Hatch Road and Whitmore Avenue serve as the main east-west arterials. Faith Home Road and Service Road will serve more important circulation functions for Ceres in the future.

State Route 99 runs through Ceres in a northwest/southeasterly direction, bisecting the city. It links Ceres with other cities in the San Joaquin Valley and provides connections to the San Francisco Bay Area.

METHODOLOGY

Roadway Classification System

The Circulation Diagram (Figure 4-1) depicts the freeway, expressway, arterial, and primary collector roadway system in Ceres. All other roadways are classified as secondary collectors or local streets. Table 4-1 summarizes the classification system and standards.

Traffic Modeling

The first step in the analysis of the traffic implications of the General Plan involved the development of future (2015) traffic volume forecasts. In order to conduct this analysis, a traffic forecasting tool specific to the Ceres was developed. The tool, known as a travel forecasting model (MINUTP), is based on a similar countywide model used by the Stanislaus Area Association of Governments (SAAG). The model uses estimates of development of all vacant and underutilized land within the Urban Growth Area for the year 2015; feasible improvements were identified to accommodate traffic from future development based on the Land Use Diagram. These improvements are identified in the Circulation Diagram in the Policy

Document. Future traffic on the proposed transportation system was evaluated in terms of level of service.

Outside the Planning Area, the model is coincident with the SAAG model, including the projects included in the SAAG 2015 network as of December 8, 1993. It also includes SAAG 2015 land use data as of February 20, 1994. Within the Planning Area, the model has been refined to better respond to the higher level of network detail needed to evaluate the General Plan; it includes a larger number of zones and additional detail in the highway network. Within the Planning Area, both the land use data and the highway system are based on the Land Use Diagram and the Circulation Diagram of the General Plan Policy Document. Additional details on the travel model can be found in a document titled, City of Ceres Travel Forecasting Model, Model Documentation and User Manual, Dowling Associates, June 27, 1995, available at the City of Ceres Public Works Department, 2200 Magnolia Avenue, in Ceres.

TABLE 4-1

HIERARCHY OF STREETS AND STREET STANDARDS

Description									
Local Streets Collector									
Arterial									
Expressway									
Freeway									
		Secondary		Primary					
1.	Street Right-of-Way Width	50 Feet	50-60 Feet	50-60 Feet	90-120 Feet	100+			
Feet	150-Feet								
2.	Travel Lanes	2	2	2	4+	4+	4+		
	Left-Turn Lanes	No	No	Sometimes	Usually	Usually	No		
3.	Speed Limit	25 MPH	25-30 MPH	25-35 MPH	25-55 MPH	40-55 MPH	55 MPH		
4.	Level of Service	C	C	D/C	D	D	D		
5.	Distribution Intervals	Throughout	Throughout	½ Mile Grid	1 Mile Grid	Varies			
	Varies								
6.	Average Daily Trips	Generally less than 500	500-4,000	3,000-10,000					
	10,000-35,000	25,000-72,000	30,000-72,000						
7.	Access	Individual lot access. Should not link directly with arterial collectors links neighborhood with schools, parks, shopping centers, arterial limiting individual lot access, urge joint driveways, back-up lots and access-ways to reduce driveways. No SFR driveways				Emphasis on			
		At grade intersections with primary collectors, arterial and expressways. Very limited right turn driveways may be permitted at intersections				Grade-separated interchanges			
8.	Examples	Darwin Ave.							
	Peachwood Ave.								
	Coty Court	Glasgow Dr.							
	Acorn Ln.								
	Calcagno	Rose Avenue							
	Caswell Ave.								
	Roeding Rd.								
	Moffet Rd.	Whitmore Ave.							
	Mitchell Rd.								
	Faith Home Rd.								
	Hatch Rd.								

During the public review process, the residential holding capacity of the Land Use Diagram was reduced by approximately 10 percent. This reduction did not substantially change the traffic impacts; the results reported in this chapter are, therefore, the same as those reported in the Draft EIR (April 1996).

Levels of Service

To measure operating conditions of the roadway system, future (2015) traffic on the proposed transportation system was evaluated in terms of level of service (LOS). Service levels vary qualitatively from "A" (the best) to "F" (the worst). Table 4-2 contains the standards for the six Service Levels used in Ceres; Table 4-3 provides additional volume/capacity standards for various types of roadway facilities.

TABLE 4-2

DEFINITIONS OF LEVEL OF SERVICE IN URBAN AREAS

Level of Service	Description	V/C Ratio
A	Describes operations with very low delay, i.e., less than 5.0 sec per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	Ratio < 0.60
B	Describes operations with delay in the range of 5.1 to 15.0 sec per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	= 0.61-0.70
C	Describes operations with delay in the range of 15.1 to 25.0 sec per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	= 0.71-0.80
D	Describes operations with delay in the range of 25.1 to 40.0 sec per vehicle. At level "D", the influence of congestion becomes more noticeable. Long delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	= 0.81-0.90
E	Describes operations with delay in the range of 40.1 to 60.0 sec per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.	= 0.91-1.00
F	Describes operations with delay in excess of 60.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	> 1.00

Source: Transportation Research Board, Highway Capacity Manual, 1985

TABLE 4-3

VOLUME/CAPACITY RATIOS FOR VARIOUS HIGHWAY FACILITIES

LOS	Freeways		Two-Lane	
	Rural Highways		Multi-lane	
	Rural Highways		Urban Streets	
A	0.35	0.10	0.26	0.60
B	0.55	0.21	0.52	0.70
C	0.78	0.34	0.71	0.80
D	0.93	0.59	0.88	0.90
E	1.00	1.00	1.00	1.00

Thresholds of Significance

For purposes of this EIR, an impact is considered significant if the projected level of service on an existing or proposed roadway would deteriorate below the service level standards of the General Plan, as laid out in Policy 2.A.2 as follows:

The City shall develop and manage its roadway system to maintain Level-of-Service of at least "C" on secondary collectors and local streets and Level-of-Service D on primary collectors, arterials, expressways, and freeways. Exceptions to these level of service standards may be allowed in infill areas where the City finds that the improvements or other measures required to achieve the LOS standards are unacceptable because of the right-of-way needs, the physical impacts on surrounding properties, and/or the visual aesthetics of the required improvement and its impact on community identity and character.

While this policy permits exceptions to service level standards in some instances, an impact will be considered significant for the purposes of this EIR if development under the General Plan would exceed the service level standards.

IMPLICATIONS OF THE LAND USE DIAGRAM

Using the above standards as a guide, an analysis of existing service level on the major segments of Ceres' roadway system was performed using 1993 traffic data. The General Plan Background Report contains a complete summary of this analysis. In summary, the system is currently working within the City's policy with the following exceptions:

- Mitchell Road north of Hatch Road is computed to operate at LOS E
- Herndon Road north of Hatch Road is computed to operate at LOS F
- Blaker Road (a minor collector) south of Whitmore Avenue is computed to operate at LOS D
- Whitmore Avenue between Morgan Road and Central Avenue is computed to operate at LOS E/F

Traffic Service Levels Without Roadway Improvements

The next step in the process was to run the model based on development of all vacant and underutilized land in the Urban Growth Area to identify where roadway improvements would be needed to serve future development. As shown in Figure 4-2, most of the City's major roadways would operate at unacceptable levels of service; Mitchell Road operates at LOS F along its entire length, Hatch Road would operate at E and F; Whitmore Road would operate at LOS F along some segments, and Service Road would operate at E and F along some segments.

It would be expected that the existing roadway network would require extensive improvements when 20 years of development potential are modeled. The Circulation Plan of the Policy Document includes a roadway classification system that identifies future roadway improvements to address existing problems and minimize future unacceptable levels of service.

Future Roadway Improvements

Achieving higher levels of service will require construction of new roadways and the widening of existing roadways. Several improvements to the roadway network were included in the travel forecast for 2015, corresponding to the Circulation Diagram (Figure 4-1). These include:

- Whitmore Road: Widen to four lanes plus median from Ustick Road to SR 99.
- Service Road: Widen to six lanes plus median from Ustick Road to Mitchell Road and to four lanes plus median from Mitchell Road to Faith Home Road.
- Redwood Road: Create a major collector on the general alignment of Redwood Road between Ustick Road and Crows Landing Road and between Morgan Road and Mitchell Road.
- Grayson Road: Widen Grayson Road to four lanes plus median from Ustick Road to Mitchell Road; this is a roadway at the periphery of the Planning Area and may not require widening until near the end or beyond the planning horizon of this plan; however, it is propitious to reserve rights-of-way for the roadway.
- Ustick Road: Widen to four lanes plus median between Whitmore Road and Grayson Road; this is a roadway at the periphery of the Planning Area and may not require widening until near the end or beyond the planning horizon of this plan; however, it is propitious to reserve rights-of-way for the roadway.
- Crows Landing Road: Widen to four lanes plus median from Whitmore Avenue to Grayson Road.
- Central Avenue: Widen to four lanes plus median from Hatch Road to Whitmore Avenue and from Pine Street to Grayson Road.
- Mitchell Road: Widen to six lanes plus median from the Tuolumne River to Grayson Road, including a paired one-way couplet between Roeding Road and SR 99 and a new over-crossing of SR 99.

- Hatch Road: Widen to six lanes between SR 99 and Faith Home Road.
- Faith Home Expressway: Create/widen to six lane expressway from SR 99 to a connection with Claus Road in Modesto; the project includes a new crossing of the Tuolumne River. Development of the expressway with river crossing would be a multi-jurisdictional effort, serving regional traffic in the Modesto-Ceres urban area.

Traffic Service Levels With Roadway Improvements in Circulation Diagram

Results of the process of forecasting traffic for the General Plan are shown in Figures 4-3 and 4-4. Figure 4-3 shows projected daily traffic, while Figure 4-3 identifies locations where the service levels are projected at Levels D, E or F. The following paragraphs discuss locations where the projected service level exceeds the City's proposed standards.

The City's current proposed Service Level standards are that arterial streets and expressways should operate at Service Level D. Figure 4-4 indicates that a number of locations will exceed those levels by the year 2015. These locations include the following:

- SR 99 throughout the city: This facility is currently six lanes (three lanes in each direction) and is included in the forecasting model as having four lanes in each direction, corresponding to the SAAG network for 2015 and representing a one-lane widening in each direction. Both the Ceres model and the SAAG model indicate that demand will exceed the desired service level by the year 2015. This is primarily a regional problem, with Ceres contributing relatively little to the overall volumes on this facility.
- Hatch Road between SR 99 and Faith Home Road: This plan includes proposals to widen Hatch Road to six lanes, the maximum width within the available right-of-way. The right-of-way is bounded by an irrigation canal and on the south by existing development for virtually the entire segment.
- Whitmore Avenue between Blaker Road and Faith Home Road: This east-west arterial is built to its maximum width within the existing right-of-way. Significant numbers of residential properties front this portion of Whitmore Road, and many would be quite close to the edge of a widened facility.
- Mitchell Road between SR 99 and Hatch Road: The plan includes proposals to widen Mitchell Road to six lanes plus median through its length, including a separated one-way couplet between SR 99 and Roeding. Even with this amount of improvement, the facility is projected to operate at LOS E or F. The proposed widening is the maximum that is practical given constraints on the right-of-way. The Mitchell Road corridor is a major access point for people with origins/destinations in Modesto, and is thus as much of a regional problem as it is a problem for the City of Ceres. The proposed Faith Home Expressway is seen as a partial remedy to the Mitchell Road corridor, but even with its inclusion in the General Plan, congestion is projected to remain on Mitchell Road.

- Faith Home Road between Whitmore Avenue and Hatch Road: This one mile segment is projected to operate at Service Level E in 2015. This projection is made with a six-lane-plus median design. Since this is the only section of Faith Home that would exceed the Service Level criterion, and since it is only slightly in excess of the standard, the appropriate action would appear to be to monitor this location as development proceeds. Toward the end of the General Plan horizon, it may be necessary to review the design of the Faith Home Road expressway in this section; however, it would appear to be premature to anticipate the need for additional right-of-way at this time.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies and programs address the effects of future development on the street and roadway system.

Street and Roadway System

2.A.1. The City shall plan, design, and regulate the development of the city's street system in accordance with the functional classification system described in this chapter and reflected in Circulation Diagram and with the City's street standards and specifications.

2.A.2. The City shall develop and manage its roadway system to maintain Level-of-Service of at least "C" on secondary collectors and local streets and Level-of-Service D on primary collectors, arterials, expressways, and freeways. Exceptions to these level of service standards may be allowed in infill areas where the City finds that the improvements or other measures required to achieve the LOS standards are unacceptable because of right-of-way limitations, physical impacts on surrounding properties, and/or the visual aesthetics of the required improvement and its impact on community identity and character.

2.A.3. The City shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.

2.A.4. The City shall require an analysis of the effects of traffic from major development projects (generally those that would generate 500 or more peak-hour trips per day). Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project. Such improvements may include a fair share of improvements that provide benefits to others.

2.A.5. The City shall pursue financing in a timely manner for all components of the transportation system to achieve and maintain adopted level of service standards.

2.A.6. The City shall assess fees on new development sufficient to cover the fair share portion of that development's cumulative impacts on the local and regional transportation system. Exceptions may be made when new development generates significant public benefits (e.g., low income housing, primary wage earner employment) and alternative sources of funding for the improvements can be obtained to offset foregone revenues.

2.A.7. The City shall continue to support development of an expressway system to handle regional traffic in the Modesto-Ceres urban area. In particular the City will encourage the development of Faith Home Road and Service Road as expressways to relieve truck traffic and through-traffic on Mitchell Road.

2.A.8. The City shall continue to participate in the countywide Congestion Management Plan.

2.A.9. The City shall encourage the provision of capacity-enhancing improvements to State Route 99 or improvements to other alternative routes or modes needed to accommodate increased local and regional traffic volumes and to relieve projected traffic congestion as identified in the Congestion Management Program analysis. To this end, the City will, together with the other affected and responsible agencies, participate in the planning, programming and identification of financing for these improvements.

2.1. The City shall update and maintain the Public Facilities Plan to reflect the updated General Plan, and to update its road development impact fees.

2.2. The City shall continue to participate in efforts to identify and secure funding sources for the regional expressway system.

2.3. The City of Ceres shall work with Caltrans, Stanislaus County, City of Modesto, and the county's other cities through the Stanislaus Area Association of Governments to develop a plan, including financing, for capacity improvements to State Route 99 needed to accommodate projected traffic volumes and to relieve traffic congestion.

Major Corridors

2.B.1. The City shall seek to maintain acceptable traffic flow conditions along Ceres' major corridors while allowing for new development along these corridors. To this end, the City shall require site plans for new development along Hatch Road, Mitchell Road, and Whitmore Avenue. To this end, the City shall:

- a. Require consolidation of driveway access; if necessary, driveway improvements should include relocation of driveway access points on existing sites
- b. Require combination of parking lots and access points with joint access and parking agreements where possible
- c. Require medians where necessary to limit turning movements
- d. Require site plans to facilitate entrance and exits to avoid cars queuing in street
- e. Limit or prohibit drive-up windows where peak traffic queues cannot be accommodated on-site.

2.B.2. The City shall allow only limited direct access to industrial, commercial, and high density residential uses along Hatch Road, Service Road, and Faith Home Road as approved through site plan review.

2.B.3. The City shall restrict access from driveways and minor streets onto Faith Home Road and Service Road and shall allow only right-turn in, right-turn out access movements from secondary collectors.

2.4. The City shall prepare and adopt an overlay zone for the major corridors requiring site plan review consistent with the provisions of Policy 2.B.1.

New Residential Development

1.D.2. Consistent with the City's annexation policy (Appendix A), new residential development shall occur after adoption of areawide plans (i.e., master plans or specific plans). Areawide plans shall indicate the locations of various residential land uses, parks, schools, neighborhood commercial, streets, bikeways, walkways, and other infrastructure. Areawide plans shall include a mix of residential densities.

Each residential areawide plan shall at a minimum address the following: . . .

d. Distribution and location of roadways, including design standards for and the general alignment of arterial and collector streets. Specific provisions for local streets and bikeways should be shown, where necessary.

e. Provisions for the extension of the existing city roadway system into new development areas. New development shall be linked to adjacent existing neighborhoods and planned neighborhoods.

1.D.4. The City shall require residential subdivisions to be designed to provide well-connected internal and external street, bicycle, and pedestrian systems.

Roads are to be designed and improved according to the Circulation Diagram. Policy 2.A.6 indicates that the City shall assess fees and/or dedication sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system as a partial means of financing the cost of the proposed improvements.

IMPACTS

The General Plan will provide for new residential, commercial, and industrial development to accommodate demand over the next 20 years. Development will affect the roadway system by increasing traffic volumes on existing roadways. The General Plan's level of service policy strives to maintain level of service D on major roadways and C on minor collectors and local roads.

The Circulation Diagram includes roadway improvements to meet this level of service, except for the locations described below, and plan policies and programs provide for developing and financing roadway improvements.

- Hatch Road between SR 99 and Faith Home Road: Traffic is projected to operate at LOS F along this segment. The plan includes proposals to widen the expressway to six lanes, its

maximum width within the available right-of-way. The right-of-way is bounded by an irrigation canal that alternates from the north east of Central to the south west of Central and by existing development for virtually the entire segment. Additional widening of this facility would require undergrounding of the canal and/or acquisition of existing developed areas; these costs would be prohibitive and widening is therefore not considered feasible. The future service level on this roadway is considered a significant adverse impact.

- Whitmore Avenue between Blaker Road and Faith Home Road: Traffic is projected to operate at LOS E along much of this roadway segment and LOS F between Blaker Road and SR 99 and along a short stretch west of Mitchell in 2015. This east-west arterial is built to its maximum width within the existing right-of-way. Significant numbers of residential properties front this portion of Whitmore Road, and many would be quite close to the edge of a widened facility. Therefore, widening of this roadway was not considered feasible for the General Plan due to the impact on these adjacent properties. The future service levels on this roadway are considered a significant adverse impact.
- Mitchell Road between SR 99 and Hatch Road: The plan includes proposals to widen Mitchell Road to six lanes plus median through its length, including a separated one-way couplet between SR 99 and Roeding. Even with this amount of improvement, the facility is projected to operate at LOS E or F. The proposed widening is the maximum that is practical given constraints on the right-of-way. The Mitchell Road corridor is a major access point for people with origins/destinations in Modesto, and is thus as much of a regional problem as it is a problem for the City of Ceres. The proposed Faith Home expressway is seen as a partial remedy to the Mitchell Road corridor, but even with its inclusion in the General Plan, congestion is projected to remain on Mitchell Road. Ceres' contribution to the roadway service levels on this roadway is considered a significant adverse impact.
- Faith Home Road between Whitmore Avenue and Hatch Road: This one mile segment is projected to operate at Service Level E in 2015. This projection is made with a six-lane-plus median design. Since this is the only section of Faith Home that would exceed the Service Level criterion, and since it is only slightly in excess of the standard, the appropriate action would appear to be to monitor this location as development proceeds. Toward the end of the General Plan time horizon, it may be necessary to review the design of the Faith Home Road expressway in this section; however, it would appear to be premature to anticipate the need for additional right-of-way at this time. Since modeling indicates that this section would exceed LOS standards, Ceres' contribution to the roadway service levels on this roadway is considered a potentially significant impact.
- SR 99 throughout the city: This facility is included in the forecasting model as an eight-lane freeway, with four lanes in each direction, corresponding to the SAAG network for 2015 and representing a one-lane widening in each direction. Both the Ceres model and the SAAG model indicate that demand will exceed the desired service level by the year 2015. This is primarily a regional problem, with Ceres contributing to the cumulative traffic on this facility. Ceres' contribution to the roadway service levels on this roadway is considered a significant cumulative impact.

MITIGATION MEASURES

Several roadways were identified as having service levels exceeding D, including the following:

- Hatch Road between SR 99 and Faith Home Road (LOS F)
- Whitmore Avenue between Blaker Road and Faith Home Road (LOS E/F)
- Mitchell Road between SR 99 and Hatch Road (LOS E/F)
- Faith Home Road between Whitmore Avenue and Hatch Road (LOS E)
- SR 99 throughout the city (LOS D/E/F)

These were identified as significant adverse impacts. Additional roadway improvements to these roadways beyond that included in the Circulation Diagram were not included as part of the General Plan for the reasons outlined above; the existing rights of way were inadequate and the effects of widening would be prohibitively costly and impacts on adjacent properties were considered unacceptable.

The General Plan includes numerous policies encouraging the use of transit and other modes of transportation to reduce the impacts on roadways. In addition, as roadways are developed, specific operational improvements, such as synchronized intersections, limitations on driveway and local street access, may also improve future service levels on these roadways. There are no mitigations currently feasibly available, however, that would guarantee that these service levels would be within acceptable levels.

4.2 TRANSIT FACILITIES AND SERVICES

This section assesses the potential effects of development under the General Plan on Ceres' public transportation system.

ENVIRONMENTAL SETTING

Existing public transportation systems in Ceres are described in Chapter 5 of the General Plan Background Report. Five services are provided, including the Ceres Dial-A-Ride, the Modesto Area Express, Stanislaus County Transit, Modesto Dial-A-Ride, and Central Dial-A-Ride.

Ceres Dial-A-Ride (DAR) offers a demand-responsive service weekdays from 6:30am to 8:00pm and four hours of service on Saturdays. The service area which is bounded by the Tuolumne River, Boothe Road, Whitmore Avenue, Faith Home Road, Redwood Road, Central Avenue, Grayson Road, Crow Landing Road, Whitmore Avenue, and Herndon Road. This service is available to anyone within the service area with a minimum of 30 minute advance call. During the 1994-1995 fiscal year, estimated ridership was 64,556. The program operates through contract with Laidlaw. Passengers can transfer from the Ceres Dial-A-Ride to Modesto Area Express (MAX), the Modesto/Turlock bus service, the Modesto Dial-A-Ride, or the County's Westside Stage.

The Modesto Area Express provides fixed route bus service in the City of Modesto and the immediate surrounding area, including northern Ceres. The transfer point to Modesto Area

Express Routes 3 and 15 is located at the northeast corner of Herndon and Hatch Roads by the K-Mart Shopping Center. The Modesto Area Express operates 16 fixed routes during the week from 6:15 am to 6:30 pm and on Saturdays from 8:15 am to 6:15 pm.

Stanislaus County Transit (SCT) operates the Modesto/Turlock Bus Service from downtown Modesto to downtown Turlock via Ceres and Keyes. The bus stop is located on the southwest corner of the intersection of Third Street and Magnolia Street by the Library. SCT provides ten departures daily, with morning and evening express service.

Modesto Dial-A-Ride offers service in the Modesto urban area, including Salida, Empire, and the Howard Training Center in Ceres. The service gives priority to senior citizens and disabled residents. Evening service is open to the general public. This service requires a two-hour advance call.

For intercity service between Ceres, Modesto, Turlock, Oakdale, Riverbank, Hughson, and Waterford, the Central Dial-A-Ride provides service with a two-hour advance call. This service is offered weekdays from 7:30am to 5:00pm.

According to the Circulation Element and Traffic Impact Analysis for the city of Ceres prepared by Omni-Means, the ridership profile indicated that the majority of the patrons are women, elderly, disabled, students, and low-income workers, drawing the conclusion that the role of public transportation as an alternative means of transportation to the average commuter is somewhat limited. The ridership record seems to suggest that most regional and local transit needs are met. More recently, the Stanislaus Area Association of Governments (SAAG) analyzed the transit needs in the county and found no unmet needs.

METHODOLOGY

Assumptions

1. Existing service providers will continue to be the major form of transit service for at least the next five to ten years, although additional transit opportunities may be realized based on major employment and/or population concentrations with new development later in the time frame of the General Plan.
2. It will probably not be feasible for the City of Ceres to operate its own fixed-route service within the time frame of the General Plan. There is, however, a need to plan for such service as the city grows and provide opportunities for connections to a regional system.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss public transit services as an issue to be addressed in the environmental review process. Such services do, however, play an important role in the overall development of a community's transportation system. For purposes of this EIR, an impact is considered significant if new development would adversely affect existing transit services or would create demand for such services that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Land Use Diagram essentially provides for a continuation of current levels of development, together with increased areas for industrial expansion. The relative densities, which are consistent with current uses, suggest that the types of transit service that are operational today will continue to be appropriate in the future. Dial-A-Ride should be the most likely form of public transportation in the city for the foreseeable future. As the city expands in size, the number of vehicles needed to serve the greater population may need to grow at a rate proportional to the growth in population. A fixed-route system may become feasible at some time in the future, and the City may choose to review such needs on a periodic basis. However, current limits on funding make the probability of beginning a new fixed route system highly unlikely. Expansion of Modesto's service to serve a more regional function is more likely. Large employment centers or commercial centers are the most likely candidates for fixed route service.

GENERAL PLAN POLICY RESPONSE

In anticipation of increased levels of development that may warrant demand for public transportation or a fixed route system, the Policy Document includes a substantial number of policies intended to ensure that public transportation needs are considered in the design of new development. These policies include the following:

Citywide Growth and Development

1.B.9. The City shall promote pedestrian, bicycle, and transit access and circulation in designating and approving new development.

Commercial Land Use

1.F.2. Commercial facilities should be designed to promote transit, pedestrian, and bicycle access. The City shall require that new commercial development be designed to facilitate pedestrian circulation within and between commercial sites and nearby residential areas rather than being designed solely to serve vehicular circulation.

Transit Facilities and Services

2.D.1. The City shall require provision of adequate off-street parking in conjunction with new development. Parking shall be landscaped, located convenient to new development, and easily accessible from the street system. The adequacy and appropriateness of parking requirements in the Zoning Ordinance shall be periodically reevaluated.

2.D.2. The City shall require that parking lots be designed to organize vehicle movement for maximum safety for pedestrians and motorists and provide handicapped access.

2.D.3. The City shall promote priority parking in safe and convenient locations for employee car pools and cyclists.

Air Quality -- Transportation/Circulation

6.G.2. The City shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

6.G.3. As appropriate and as warranted by the demand for transit services, the City shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative.

Policies of the General Plan support opportunities for transit, especially in connection with new development, and promote development patterns that attempt to maximize the potential for transit use in the future.

IMPACTS

Development under the General Plan will create the need for expansion of existing services (e.g, Dial-a-Ride and paratransit services). The policies of the City encourage and support transit for service to senior, disabled, minority, low income and transit-dependent persons; they also support efforts to provide paratransit services for those unable to use conventional transit. The policies of the General Plan also generally support transit development and use and promote new development patterns and densities to foster transit use. Future demand for fixed route service will probably be most feasible in large employment areas or commercial areas. Expansion of fixed route transit system will require federal, state, and local transportation subsidies. Federal, state, and local air quality agencies and laws require reductions in automobile use, and require transportation funds to be used for alternative transportation methods. Higher use of transit should result in a higher level of support for transit in federal, state, and local transportation planning.

In providing the opportunity for expanded use of transit services, the General Plan would have a less than significant impact on transit services.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the General Plan are necessary.

4.3 NON-MOTORIZED TRANSPORTATION

Non-automotive transportation includes pedestrian and bicycle travel. Policies of the General Plan seek to establish a comprehensive bicycle plan and to foster pedestrian activity.

ENVIRONMENTAL SETTING

Chapter 5 of the Background Report indicates that the City is in the process of implementing a bikeway plan which is comprised of a network of bicycle paths, lanes, and bikeways. The Ceres Bikeway Plan includes three types of bicycle facilities. Class I facilities are paths independent of the roadway with a minimum width of 8 feet. Class II facilities are striped areas or lanes designated for bicycle use located within roadways. Class III facilities are bike lanes on designated roadways, usually collectors or local streets, that are marked primarily by signs. The network is shown in Figure 2-2 of the Policy Document. Many of the Class III bike paths east of Route 99 and south of Hatch Road have been signed. The concept behind the bicycle route system is to link open space, school facilities, major commercial centers, and areas of employment within the city's sphere of influence. In this General Plan process, the major task will be to extend the current plan into new areas of development.

State Route 99 and the Southern Pacific Railroad tracks form a major barrier to pedestrian access between the east and west sides of the city. This problem exists throughout the community, but is of particular concern in the downtown area. The Pine Street and Whitmore Avenue overcrossings are the only pedestrian access from the west side residential area to the downtown/high school area. Residents seeking a "short-cut" have been known to climb the fence to cross the railroad tracks and walk along the side of the freeway ramps to cross under Route 99.

METHODOLOGY

This analysis of the effect of new development on non-motorized transportation focuses on the creation and retention of opportunities for such transportation. This analysis focuses qualitatively on the provision of opportunities for such transportation in conjunction with future development.

Thresholds of Significance

The California Environmental Quality Act does not specifically discuss non-motorized transportation as an issue to be addressed in the environmental review process. For purposes of this EIR, an impact is considered significant if new development would create demand for non-motorized transportation that could not be met.

IMPLICATIONS OF THE LAND USE DIAGRAM

The expanded area of development, particularly of residential development, will create additional demand for bicycle facilities. The current roadway standards provide for striping of Class II bicycle lanes on major collector streets, which will form a significant level of connection within the context of the General Plan. The concept of placing bicycle facilities on collector streets harmonizes with this concept that lower volume facilities such as collector streets provide a safer environment for bicycles and minimize potential conflicts between motorized vehicles and bicycles.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes a substantial number of policies intended to enhance opportunities for non-motorized transportation as development occurs. These include the following:

Citywide Growth and Development

1.B.8 The City shall promote pedestrian, bicycle, and transit access and circulation in designating and approving new development.

New Residential Areas

1.D.1. The City shall encourage the creation of well-defined residential neighborhoods throughout the city, including in newly-developing areas. Each neighborhood should have a clear focal point, such as a park, school, or other open space and community facility, and shall be designed to promote pedestrian convenience. To this end, the City shall consider the form of historic neighborhoods, including emphasis on pedestrian access and circulation, and tree-lined parkways, as models for the planning and design of new residential neighborhoods. (See also Policy 2.C.2. in the “Residential Streets” section of Chapter 2)

1.D.2. Consistent with the City’s annexation policy (Appendix A), new residential development shall occur after adoption of areawide plans (i.e., master plans or specific plans). Areawide plans shall indicate the locations of various residential land uses, parks, schools, neighborhood commercial, streets, bikeways, walkways, and other infrastructure. Areawide plans shall include a mix of residential densities.

Each residential areawide plan shall at a minimum address the following: . . .

d. Distribution and location of roadways, including design standards for and the general alignment of arterial and collector streets. Specific provisions for local streets and bikeways should be shown, where necessary.

h. Provisions for linking residential neighborhoods, parks, schools, shopping areas, and employment centers through a system of pedestrian and bicycle pathways.

1.D.3. The City shall require residential subdivisions to be designed to provide well-connected internal and external street, bicycle, and pedestrian systems.

1.D.4. The City shall promote architectural and landscape design features in new development that create more pedestrian-friendly neighborhoods, such as rear, setback, or detached garages, front porches, tree-lined streets, and landscaped strips between street and sidewalks.

Commercial Land Use

1.F.2. Commercial facilities should be designed to encourage and promote transit, pedestrian, and bicycle access. The City shall require that new commercial development be designed to

encourage and facilitate pedestrian circulation within and between commercial sites and nearby residential areas rather than being designed solely to serve vehicular circulation.

Non-Motorized Transportation

2.F.1. The City shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provide connections between the city's major employment and housing areas and between its existing and planned bikeways. The bikeway plan is shown in Figure 2-2.

2.F.2. The City shall promote bicycling and walking through appropriate facilities, programs, and information.

2.F.3. The City shall pursue alternative sources of funding for the development and improvement of bikeways and pedestrian pathways.

2.F.4. The City shall require developers to finance and install pedestrian pathways, bikeways, and multi-purpose paths within new development, as appropriate.

2.F.5. The City shall encourage the development of adequate, convenient, and secure bicycle parking at employment centers, schools, recreational facilities, transit terminals, commercial businesses, and in other locations where people congregate.

2.F.6. The City shall require new multi-family residential, commercial and industrial developments to include bicycle facilities.

2.F.7. The City shall promote bicycle safety education to children and adults.

2.F.8. The City shall regard commuter bicycle routes as higher priorities than recreational routes.

2.F.9. The City shall consider the needs of bicyclists when new roadways are constructed and existing roadways are upgraded.

2.F.10. The City shall require new development to provide adequate rights-of-way to accommodate bikeways where needed on new collector, arterials, and expressway streets, and to contribute to the development of needed bikeways.

2.F.11. The City shall develop safe and pleasant pedestrian ways. To this end, the City shall ensure adequately wide sidewalks to accommodate pedestrian movement.

2.F.12. The City shall encourage separation of sidewalks from streets on arterials and major collector streets.

2.F.13. The City shall ensure that pedestrian access continues to be provided when the Pine Street and Whitmore Avenue overpasses are improved, and shall encourage improved pedestrian and bicycle facilities with these improvements.

Air Quality -- Transportation/Circulation

6.G.3 The City shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities

These policies and programs provide that new residential, commercial, and employment development are designed to encourage access by bicycle or foot and encourage the development of bicycle routes.

IMPACTS

The General Plan provides for a sufficient level of bicycle facilities to serve the existing and newly developing areas of the City. As such, no significant impacts are anticipated. The condition of the pedestrian barrier created by SR 99 is a pre-existing condition that is not remedied in this General Plan. Alternatives were investigated for overpasses or underpasses, but no cost-effective solution was developed during the preparation of the Draft General Plan. Policies of the plan provide, however, that existing and future overpasses provide for improved pedestrian and bicycle facilities.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

1. The first part of the paper discusses the importance of the research and the objectives of the study.

2. The second part of the paper describes the methodology used in the study, including the data collection and analysis techniques.

3. The third part of the paper presents the results of the study, including the findings and the conclusions drawn from the data.

4. The fourth part of the paper discusses the implications of the findings and the limitations of the study.

5. The fifth part of the paper provides a summary of the study and the conclusions.

6. The sixth part of the paper discusses the future research and the potential applications of the findings.

7. The seventh part of the paper provides a conclusion and the final remarks.

8. The eighth part of the paper provides a list of references and the sources used in the study.

9. The ninth part of the paper provides a list of appendices and the supplementary materials.

10. The tenth part of the paper provides a list of figures and the visual representations of the data.

11. The eleventh part of the paper provides a list of tables and the data presented in the study.

12. The twelfth part of the paper provides a list of footnotes and the additional information.

13. The thirteenth part of the paper provides a list of acknowledgments and the people who helped in the study.

14. The fourteenth part of the paper provides a list of the authors and the contact information.

CHAPTER 5

PUBLIC FACILITIES AND SERVICES

This chapter assesses the potential impacts of development under the General Plan on the public facilities and services serving Ceres. The issues addressed in this chapter are water, wastewater, storm drainage, law enforcement, fire protection, solid waste collection and disposal, and utility services.

This chapter focuses on development within the Urban Growth Area. Where development of Reserve areas will affect the overall capacity of the permanent infrastructure (e.g., trunk lines) that will ultimately be required to serve growth throughout the Planning Area, estimates of capacity of development and required system capacity to serve future development of the Reserve area are made.

5.1 PUBLIC WATER SUPPLY AND DELIVERY

ENVIRONMENTAL SETTING

City of Ceres Water System

The City is the main purveyor of water for domestic, commercial, and industrial water use within the city limits. An area in the northern part of the city is served by the City of Modesto (formerly Del Este Water Company). The City's sole source of water supply is currently groundwater. Chapter 6 of the Background Report describes the current water supply (including quality and treatment), demands, and delivery systems in the city. Some private systems are located within the city limits. Outside of the city limits, individual well systems provide water for agricultural and associated domestic needs. Chapter 7 of this EIR discusses issues related to surface and groundwater quality.

Regional Water Supply Planning

The city has been formally involved in investigating the potential for participating in a regional surface water supply system since 1988. The Drinking Water Authority was formed by the potential beneficiaries of the proposed water supply diversion from the Tuolumne River. This authority includes the cities of Ceres, Hughson, Turlock and Modesto, the Delhi County Water District, and Keyes Community Services District, the Hilmar Community Services District, and Denair Community Services District. The Turlock Irrigation District would act as the water purveyor since it owns the water rights.

Development of a regional surface water supply would require diversion of surface water from the Tuolumne River, construction of a centralized water treatment plant, and a delivery system. As of December 1995, the City continues to participate in negotiations with the Drinking Water Authority over the costs and feasibility of development of such a system.

METHODOLOGY

Assumptions

1. For the purpose of this EIR, the City's future water system is assumed to rely on groundwater supply and storage reservoirs with booster pump stations. Although the City continues to participate in regional efforts to develop the use of surface water supplies, the development of a surface water supply system is a long-term effort that would take many years and separate environmental review.
2. The impacts to the City's water supply and distribution system from development of the General Plan were analyzed by assuming a residential peak hour water usage factor of 1 gpm per unit to the new development potential under the General Plan. The residential peak hour water usage includes the demands for the industrial and commercial land uses.
3. Peaking factors were provided by City staff. A maximum day to peak hour demand ratio of 2.00 was assumed; peak hour demand is assumed to be 3.4 times the annual average day demand.
4. The number of additional new wells was determined by estimating the maximum day demands and available well capacity. The typical capacity of each well is between 750 gpm to 1,000 gpm. A conservative capacity of each well was assumed to be 750 gpm to calculate the number of wells required to accommodate future growth. The existing well capacity reserve is to be maintained by constructing additional wells to meet the maximum day demands generated by future growth.
5. The required storage capacity was determined by using the California Administrative Code Title 22. The storage capacity in conjunction with the new wells will accommodate the peak hour demands.
6. Main distribution pipelines were designed to carry fire flow and peak hour demand. A grid system consisting of a minimum pipe size of 12 inches is required by City staff (see Figure 5-1).
7. The City of Ceres implemented a water conservation program in 1977; enforcement of the program began in 1987. For the purposes of this analysis, it is assumed that the conservation program will remain in place and there will not be any major revisions to the existing program.
8. The City will continue to rely on state and federal drinking water standards and mandates. The EIR addresses the requirements of SB 901 regarding water supply planning, and sets the framework for assessing future projects with respect to SB 901 requirements.

Thresholds of Significance

For purposes of this EIR, an impact is considered significant if adoption or implementation the General Plan would result in the approval of development without adequate system capacity or

the ability to add capacity through facility expansion or addition of wells, or if the water supply would not be adequate to serve projected new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

Water Supply

The additional future water use reflecting the development within the Urban Growth Area and for development of the Reserve areas are presented in Table 5-1. During the public review process, the residential holding capacity of the Land Use Diagram was reduced by approximately 10 percent. This reduction did not substantially change the infrastructure requirements; the numbers reported in this chapter are, therefore, the same as those reported in the Draft EIR (April 1996).

TABLE 5-1

INCREMENTAL WATER SYSTEM REQUIREMENTS

Year	Additional Residential Units	Maximum Day Demand (GPM)	Peak Hour Demand (GPM)	Wells Required	Reservoir Capacity (Million Gallons)
Urban Growth Area	18,800	9,400	18,800	12	11
Reserve Area	6,900	3,450	6,900	5	4
Total	24,200	12,850	24,200	17	15

As discussed in the Background Report, the City currently uses groundwater as the sole source of municipal water supply. Surrounding agricultural lands rely on surface water supplied by the Turlock Irrigation District and individual wells. The aquifer is recharged primarily from precipitation and irrigation water applied to adjacent agricultural lands. The groundwater levels fluctuate seasonally and reflect City and agricultural pumping patterns.

This future water need can be met by increasing groundwater pumping, but this may exacerbate overdraft conditions, discussed in Chapter 7 of this EIR. In addition, the groundwater basin may not be replenished at its current rate due to a reduction in groundwater recharge from irrigation water. Although urban water demands do not vary significantly from agricultural demands on an annual basis, much of the irrigation water infiltrates into the aquifer and recharges the groundwater basin. Recharge does occur with urban water applied to landscaping, but to a lesser extent.

Water quality monitoring programs have not indicated significant water quality concerns in the existing service area and is adequate to meet the current needs. Test wells have been drilled in the northeast and southwest areas of the city that had water quality test results that exceeded the maximum contaminant levels for drinking water. Wells drilled in these areas of the city may require well head treatment in order to meet the drinking water standards. Changes in federal or state drinking water quality regulations may indicate differing water quality conditions than those now assumed.

Water Delivery System

Additional wells, storage reservoirs and water delivery pipelines will be required as lands are developed for urban uses. Facilities need to be sized to provide delivery capacity to meet water demands during peak conditions and at the same time to meet fire protection needs. Peaking factors, fire flow requirements, and a system pressure range, which must be utilized in designing the facilities have been established by City staff.

Estimates of the future number of wells that will be needed to serve new development within the Urban Growth Area and in the Reserve Areas are based on the additional future maximum day demands projected from new development under the Land Use Diagram. Table 5-1 indicates the incremental future maximum day demands and number of wells required.

Estimates of the future storage reservoirs that will be needed to serve new development in the Urban Growth Area and Reserve areas are based on the additional future peak hour demands projected from new development under the Land Use Diagram. Table 5-1 indicates the required storage reservoir capacity required to meet the peak hour demands.

Figure 5-1 shows the proposed water system layout. The City will update its Public Facilities Plan to reflect the supply and system needs based on the adopted General Plan. Specific locations and numbers of wells and storage reservoirs will be determined for each specific area in connection with areawide plans. All wells and storage reservoirs will be connected to major distribution lines for maximum system reliability and better system hydraulics.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan on the City's water supply and distribution system:

Water Supply and Delivery

4.C.1. The City shall continue to investigate the possibility of securing and using surface water supplies for domestic use within the Ceres area.

4.C.2. The City shall only approve new development that relies on a public water system and where an adequate water supply and conveyance system exists or will be provided.

4.C.3. The City shall promote efficient water use and reduced water demand by:

- a. Requiring water-conserving design and equipment in new construction.
- b. Encouraging water-conserving landscaping and other conservation measures.
- c. Encouraging retrofitting existing development with water-conserving devices.
- d. Providing public education programs.
- e. Distributing outdoor lawn watering guidelines.
- f. Promoting water audit and leak detection programs.
- g. Enforcing water conservation programs.

4.C.4. The City shall investigate the use of reclaimed wastewater to offset the demand for new water supplies. Such programs may include : dual water systems for potable and nonpotable water; reuse of grey water in homes or businesses for irrigation; and reuse of sewage effluent for irrigation of crops, golf courses, or city irrigation.

4.C.5. The City shall promote aquifer and wellhead protection programs to limit infiltration of pollutants that might contaminate the groundwater supply.

4.C.6. The City shall participate in a groundwater management program to preserve existing groundwater quality and quantity and to ensure future supplies.

4.5. The City shall continue to participate in the Drinking Water Authority in exploring the potential for the development of a regional surface water supply and treatment system.

4.6. The City shall prepare a water master plan to address future water supply, treatment, and distribution system. This water master plan shall explore:

- a. Water supply alternatives.
- b. Treatment alternatives, including individual and centralized wellhead treatment.
- c. Alternatives for reuse of grey water.
- d. Water conservation programs.

General Public Facilities and Services

4.A.1. Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction of those facilities. The City shall require dedication of land within newly developing areas for required public facilities, as allowed by law.

4.A.2. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. The City shall not approve new development where existing facilities are inadequate unless the following conditions are met:

- a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and
- b. The facilities improvements are consistent with the City's Public Facilities Plan and/or other functional plans for infrastructure or public facilities. Where oversized or out-of-sequence public facilities are required, reimbursement from the City or future developers, depending on the circumstances, may be arranged in accordance with the City of Ceres' Public Facilities Fees Administrative Procedures.

4.A.3. The City shall require areawide plan proposals to include plans for development and financing of public facilities and services.

4.A.4. The City shall update the Public Facilities Plan and other functional plans for infrastructure or public facilities on a regular basis to ensure compliance with appropriate state and federal laws; incorporation of state of the art technology, and compatibility with changing land use policy.

4.A.5. The City shall provide for expansion of general government services (e.g., City administrative services) in connection with new development.

General Public Facilities and Services Funding

4.B.1. The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low-income housing, significant primary wage earner employment) and/or when alternative sources of funding can be identified to offset foregone revenues.

4.B.2. The City shall seek broad-based funding sources for public facilities and services that benefit both current and future residents of the City.

4.B.3. The City shall require preparation of a fiscal impact analysis for all areawide plans or significant general plan land use amendments. The analysis will examine the fiscal impacts on the City and other service providers that result from large-scale development. Where the fiscal impact study shows that the development enabled by an areawide plan will create an operating deficits, the City shall require a mechanism to fully mitigate the funding deficit.

4.2. The City will update the Public Facilities Plan based on the updated General Plan and updated infrastructure master plans.

4.3. The City will update its development fees based on the updated Public Facilities Plan.

Policies of the General Plan seek to ensure a safe and adequate water supply for existing and future development, to provide water conservation, and to ensure that future development provides for expansion of the City's water delivery systems as needed.

IMPACTS

Development under the General Plan will increase demand for potable water and reduce the demand for agricultural water resulting in a net average demand increase on the groundwater supply. Because of the complexity of the groundwater basin and the lack of information regarding the long-term availability of groundwater to the City, overdraft and related water quality problems in the future are unknown, but an overall decrease in supply and system reliability is possible. Therefore, the impact of new development on the reliability of the City's municipal water supply is considered a potentially significant impact. Water supply impacts are also discussed in Chapter 7 of this EIR.

Water quality regulations (monitoring requirements and standards) may change in the future, thus requiring additional groundwater treatment. Any new water quality regulations would affect the entire city, and would not be considered an impact associated with new development. New development would, however, be required to address all water quality regulations current at the time they are reviewed and approved.

In the future as the city grows, the number, sizing, and phasing of additional wells, pipelines, and storage tanks, will be specifically determined based on approved development proposals and the availability of existing facilities to accommodate the new development. Given the inclusion of a General Plan policy requiring new development to provide for all facilities needed to serve the specific area, the impact on the collection system is considered to be less than significant.

MITIGATION MEASURES

The long-term reliability of a domestic water supply for the City can only be determined on a regional basis. A regional groundwater study and a basin management plan would determine and address, respectively, the impacts on the City's groundwater supply. The development of a surface water supply to augment the region's groundwater supply would certainly address this reliability issue. The City continues to participate in efforts to develop a surface water supply and distribution system. Because the surface water supply issues are still undergoing discussion and cannot be guaranteed with adoption of this plan, it is not assumed that a surface supply will be available to reduce the potential impacts in the near future.

Development of surface water would reduce the demands on groundwater from urban development and would reduce the impacts on groundwater supply to a less-than-significant level. See also discussion of Water Resources in Chapter 7 of this EIR.

5.2 WASTEWATER COLLECTION, TREATMENT , AND DISPOSAL

ENVIRONMENTAL SETTING

Chapter 6 of the General Plan Background Report describes the existing wastewater collection and treatment system in Ceres. The system is summarized below.

The City of Ceres' collection system presently has nine lift stations and one lift station at the treatment plant headworks. The collection system is a gravity sewer system with the trunk lines comprised mostly of vitrified clay pipe and some reinforced concrete pipe. (See Figure 5-2).

The City of Ceres' Wastewater Treatment Plant is located near the Morgan Road/Service Road intersection. Wastewater is pumped to the City's wastewater treatment plant. The facility consists of aerated ponds followed by percolation land disposal. The disposal area is approximately 111 acres. The plant has a dry weather capacity of 2.5 mgd.

The current flow to the Ceres Wastewater Treatment Plant is approximately 2.2 mgd. The current total flow within Ceres' city limits is estimated at 2.6 mgd, with 0.4 mgd treated at the City of Modesto treatment plant. An additional 0.4 mgd of unincorporated development north of

the city limits is also treated by the City of Modesto's plant. Combined, 0.8 mgd from the area north of Hatch and west of Central Avenue is treated at the Modesto Wastewater Treatment Plant.

METHODOLOGY

The analysis focuses on changes to the City's municipal wastewater collection, treatment, and disposal system.

Assumptions

1. Wastewater flow estimates were obtained by assuming a wastewater coefficient of 100 gallons per capita per day to the residential land use designations. This coefficient includes the contribution from commercial and dry industrial use. The coefficient was estimated from flow monitoring in Ceres' sewer systems.
2. Future population projections were estimated based on the traffic analysis zones (TAZs). The wastewater flow estimates generated from the new development was calculated based on this information and applying the wastewater coefficient to estimate the quantity of wastewater generated by future development. The TAZs containing new development not tributary to existing lines were assumed to be served by new trunk lines or parallel pipe segments to existing trunk lines.
3. The methodology used to determine pipe sizing for the proposed new trunk lines is described below:
 - a. The capacity of the trunk lines shown in the Ceres Public Facilities Plan (April 1990), was calculated based on an assumed flow velocity of 2 feet per second.
 - b. The proposed trunk lines were divided into pipe segments. Based on the location of the pipe segments within the trunk line, the segments were assigned a tributary TAZ.
 - c. The average and peak wastewater flows from the tributary TAZ were totaled for each pipe segment. Peak wastewater flows were used in determining pipe size.
 - d. The pipe diameter required was calculated using a velocity of 2 feet per second.
4. It was assumed that a lift station would be required when the pipe invert was approximately 20 feet below grade. The approximate location of lift stations was determined based on the assumption that the surface elevation is level. The minimum pipe depth of the trunk lines was assumed to be 6 feet at the upstream end of the pipe. The estimated slope of the pipe was used to estimate the pipe depth and determine the approximate lift station locations.

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in new development without adequate system capacity, either currently available or to be provided through the new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

During the public review process, the residential holding capacity of the Land Use Diagram was reduced by approximately 10 percent. This reduction did not substantially change the infrastructure requirements; the numbers reported in this chapter are, therefore, the same as those reported in the Draft EIR (April 1996).

Development under the General Plan will increase wastewater flows, requiring expansion of the wastewater collection and treatment systems. It is estimated that new development will produce approximately 5.4 mgd of average dry weather flow (ADWF) from development within the Urban Growth Area and another 1.9 mgd of ADWF for the Reserve areas.

Current ADWF for the city of Ceres is approximately 2.6 mgd; 2.2 mgd is disposed of at the Ceres plant and 0.4 mgd in the north is disposed of at the City of Modesto's plant. New development under the General Plan would increase total wastewater flows to approximately 7.0 mgd ADWF in the Urban Growth Area.

Collection System

Development under the General Plan will increase wastewater flows, requiring new collection systems. The layout of the proposed collection system is shown in Figure 5-2.

The Mitchell Road/Service Road trunk line downstream of the Barbours Lift Station has insufficient capacity to handle additional wastewater generated within the existing city limits. A parallel trunk line is proposed to serve future development.

Wastewater Treatment and Disposal

As described previously, increased wastewater flows will require expanded treatment and disposal facilities. Growth within the Urban Growth Area will produce an additional 5.4 mgd of average dry weather flow (ADWF). The City of Ceres' current ADWF is approximately 2.2 mgd resulting in approximately 7.7 mgd of ADWF to be treated and disposed of at buildout of the Urban Growth Area. The existing facility has an ADWF capacity of 2.5 mgd. There were seven general wastewater treatment and disposal alternatives available to the City of Ceres that were analyzed in the Wastewater Treatment Facility Expansion Study. All of the alternatives to achieve a tertiary level of treatment involve expanding the facility at its existing site to accommodate future growth. The selected alternative consists of constructing oxidation ditches with surface discharge.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address the implications of development under the General Plan for the City's wastewater collection, treatment, and disposal systems:

Wastewater Collection, Treatment, and Disposal

4.D1. The City shall promote reduced wastewater system demand through efficient water use by:

- a. Requiring water-conserving design and equipment in new construction;
- b. Encouraging retrofitting with water-conserving devices; and
- c. Designing wastewater systems to minimize inflow and infiltration to the extent economically feasible.

4.D2. The City shall prohibit on-site treatment and disposal facilities within its service area, except where such systems are deemed appropriate and will not pose health risks or risks to groundwater.

4.D3. The City will review development proposals in the vicinity of the wastewater treatment plant site to ensure their safety and compatibility.

4.D4. The City will investigate options for the reuse of treated wastewater.

4.8. The City shall update the Wastewater Master Plan based on the updated General Plan.

General Public Facilities and Services

4.A.1. Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction of those facilities. The City shall require dedication of land within newly developing areas for required public facilities.

4.A.2. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. The City shall not approve new development where existing facilities are inadequate unless the following conditions are met:

- a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and

- b. The facilities improvements are consistent with the city's Public Facilities Plan and/or other functional plans for infrastructure or public facilities. Where oversized or out-of-sequence public facilities are required, reimbursement from the City or future developers, depending on the circumstances, may be arranged by agreement with the city.

4.A.3. The City shall require areawide plan proposals to include plans for development and financing of public facilities and services.

4.A.4. The City shall update the Public Facilities Plan and other functional plans for infrastructure or public facilities on a regular basis to ensure: compliance with appropriate State and Federal laws; awareness of state of the art technology, and compatibility with changing land use policy.

General Public Facilities and Services Funding

4.B1. The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low-income housing, significant primary wage earner employment) and/or when alternative sources of funding can be identified to offset foregone revenues.

4.B2. The City shall seek broad-based funding sources for public facilities and services that benefit both current and future residents of the City.

4.B3. The City shall require preparation of a fiscal impact analysis for all areawide plans or significant general plan land use amendments. The analysis will examine the fiscal impacts on the City and other service providers that result from large-scale development. Where the fiscal impact study shows that the development enabled by an areawide plan will create an operating deficits, the City shall require a mechanism to fully mitigate the funding deficit.

4.2. The City will update the Public Facilities Plan based on the updated General Plan and updated infrastructure master plans.

4.3. The City will update its development fees based on the updated Public Facilities Plan.

IMPACTS

Development under the General Plan will require expansion of the existing collection system facilities and treatment capacity. In general, wastewater collection facilities would be installed in newly-developed areas at the same time as other buried utilities and will have no significant impacts other than those associated with construction.

Projected growth would also require expansion of the treatment plant. There is adequate space at the site to accommodate needed expansion. In the future as the city grows, the number, sizing, and phasing of new sewer lines and plant expansion will be specifically determined based on approved development proposals and the availability of existing facilities to accommodate the new development. Given the inclusion of a General Plan policy requiring new development to provide for all facilities needed to serve the specific area, including off-site needs, the impact on the collection and treatment system is considered to be less than significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

5.3 STORM DRAINAGE

ENVIRONMENTAL SETTING

Chapter 4 of the General Plan Background Report describes the existing conditions and trends in flooding and drainage in the Ceres area.

The majority of the current storm drainage system of the City of Ceres was constructed between 1970 and the present. The system generally uses detention with metering of flow into the TID canal system through pumps. The city also has two gravity outfalls to the Tuolumne River that serve some of the area north of Hatch Road. Prior to the early 1970s when the city was less than 6500 population, storm drainage improvements consisted of catch basins and dry wells with some gravity lines that were pumped into TID laterals or fed by gravity into the State Route 99 freeway system.

Ceres' residential storm drain system consists of regional park/detention basins, small local detention basins generally operating independently of each other with gravity or pump station/force main outfalls to TID laterals, Ceres Main Canal or the Tuolumne River (See Figure 5-3). The system also contains a limited number of catch basin/drywell, percolation basin and french drain systems. Almost all of the commercial area is served by the same storm drain system used by the residential areas. Most of the industrial area is served by percolation basins. This includes both street and on site runoff. The city does not have a comprehensive storm drainage trunk system generally because of the availability of TID facilities throughout the City's sphere of influence.

As indicated above, the Turlock Irrigation District (TID) has historically cooperated with urban areas within its jurisdiction and has allowed limited amounts of storm water to be disposed of through its irrigation facilities. Because the canal system has less capacity as it moves down stream, just the opposite of a storm drain system, the amount of storm water that can be disposed of in its system is limited by the discharge capacity at the end of the system. Additionally, there are times during the off irrigation season when the TID needs to perform maintenance on their canal system and must limit storm runoff discharge. Historically, there have not been any storm drainage treatment requirements for using the TID system or the Tuolumne River. With the possibility of expansion of the NPDES standards to smaller jurisdictions, potential storm water treatment issues now should be recognized.

METHODOLOGY

Design Considerations

This section presents the design considerations used to formulate a conceptual drainage system to serve future urban development for the two land use alternatives. Hydrology and facility configuration criteria are addressed in the following paragraphs. The design considerations will be refined in the Storm Drainage Master Plan currently under preparation.

Hydrology Criteria

Preliminary hydrology calculations were made for the areas to be included in the General Plan. The calculations were made using a computer spreadsheet model of the City's storm drainage system (existing and planned). The model was designed to develop inventory and runoff

information for the City of Ceres Storm Drainage Study and Master Plan currently in the draft stage. The model is set up to estimate flows to the disposal facilities (TID canals and laterals) available to the City plus the Tuolumne River. The disposal facilities included in the study are TID Ceres Main Canal, Tuolumne River, Delmas Ditch ID Line, TID Lateral 1, TID Lateral 2, TID Lateral 2½, Storm Drainage Detention Basin located at the wastewater treatment plant, TID spill to the Tuolumne River at Faith Home Road plus various percolation basins.

The computer model is programmed to estimate the runoff from 10 year and 50 year return frequency storms for each watershed. Runoff factors are estimated for the various types of development that currently exists in the watershed or is planned for the watershed in the Planning Area. The model then estimates the runoff from the 10 year and 50 year return frequency storms. In addition, the model is programmed to calculate the amount of pumping required to dispose of all of the 10 year storm within 48 hours.

By having the draft Storm Drainage Master Plan available it was possible to estimate the demand on each disposal facility in terms of the flow required to dispose of the detained runoff within 48 hours. The master plan data included the demand from the existing development plus the demand from the development proposed in the General Plan.

Following is the formula and hydrological criteria that was used in the calculations. This is based on the Stanislaus County Storm Drainage Design Manual (1976). The volume of runoff shall be computed from the formula $V = CAR/12$ where:

V= the Runoff volume in acre feet

C = the Runoff Coefficient

A = the Contributing Area in acres

R = 0.15 foot for the 10 year design, 24 hour storm and 0.19 foot for the 50 year design, 24 hour storm.

No allowance for percolation or outlet facilities is considered in determining the volume of detention basins. Runoff coefficients (R) in the above formula generally conform to the following: Pavement --0.90; Roof Areas--0.80; Compacted Soil--0.75; and Lawns/Open Land--0.20. These were aggregated by land use designation as follows:

RUNOFF COEFFICIENTS

Legend Land Use Designation Coefficients

LDR Low Density Residential 0.40

MDR Medium Density Residential 0.50

HD High Density Residential 0.65

NC Neighborhood Commercial 0.65

O Office 0.70

SC Service Commercial 0.85

CC Community Commercial 0.85

LI Light Industrial 0.75

GI General Industrial 0.85

AG Agricultural 0.15

CP	Community Park	0.20	
NP	Neighborhood Park	0.25	
OS	Landscaped Open Space Corridor	0.25	
ES	Elementary School	0.35	
HS	High School	0.40	
GC	Government Center	0.80	

Collection and Detention

Detention basins will be used to control the amount of flow to the TID facilities. Normally, the pumps at the TID facilities will come on when there is a demand to dispose of storm water. The pumping capacity is limited and when there is more runoff than can be disposed of by the pumps it is detained in basins until it can be disposed of. Also in case one of the TID facilities needs to be temporarily closed, the detention basins need to store all of the runoff normally disposed of in that facility until the facility is opened again and the pumps can be started.

The design criteria for the detention basins includes having the basin sized such that the maximum water surface elevation from the runoff of a 50 year storm is 1 foot below the lowest top of curb in the watershed served by the basin. Preliminary estimated detention volumes for Areas A, B and C are shown in Figure 5-3.

Commercial areas will generally be required to detain their onsite storm water before discharging into the city system. Industrial areas will be required to retain their stormwater onsite permanently. The streets in industrial areas can be drained to a positive system or, if more practical, into a separate retention basin for percolation and evaporation.

The stormwater will normally enter the detention basins by gravity with the hydraulic grade line being controlled by the water elevation in the basin from a 10 year return frequency storm. Design of storm drainage collection pipes will be as per the City standards and will normally be designed as gravity systems.

The City of Ceres Storm Drainage Master Plan will provide the general location and capacity of the detention basins to serve each watershed. The information will include the estimated storage capacity required and pumping volume required to dispose of the runoff from a 10 year storm in 48 hours.

Conveyance to Disposal Facilities

Each watershed will have at least one disposal pump that lifts the storm drainage runoff into the TID facility. After the storm runoff has entered a basin it will generally be conveyed to each disposal pump through gravity lines limited in size by the capacity of the disposal pump at the TID facility.

The intent is to have the detention basins pump into the conveyance facilities that will, in turn, convey the storm water by gravity to the disposal pump at the TID facility. When the disposal

pump at the TID facility is not running, the pump(s) at the detention basin(s) will be locked out and the basins will hold the runoff that enters them by gravity.

The size of the storm drainage conveyance pipes will be controlled by the amount of upstream pumping capacity for the basin pumps and the capacity of the disposal pumps at the TID facilities.

The City of Ceres Storm Drainage Master Plan will provide the general location and capacity of disposal pumps for each watershed area. It will also show the general layout and size required for the gravity system that will convey the storm water from the basins to the disposal pumps.

Disposal

Storm water runoff from all of the areas east, west, and south of the existing city limits will be disposed of in TID facilities. The principal facilities include Lateral 2, Lateral 2 ½, Faith Home Road Spill and Ceres Main Canal. Ceres Main Canal empties into Lateral 2 and Lateral 2 ½ for storm drainage purposes. The Faith Home Road Spill empties into the Tuolumne River. For all practical purposes the capacities of Laterals 2 and 2 ½ plus the Faith Home Road Spill limit the amount of storm drainage that can be disposed of in the TID facilities.

Normal operation of the storm drainage system will include having Laterals 2 and 2 ½ plus the Faith Home Road Spill available for disposal of storm drainage. This will be the basis for estimating the size and location of the disposal pumps in the City of Ceres Storm Drainage Master Plan that will be completed after the General Plan is adopted.

TID requires that the City make provisions be to handle storm drainage in case one of their facilities needs to be temporarily closed. It is intended that requiring the maximum water surface elevation of the stored runoff from a 50-year storm to be 1 foot below the lowest curb elevation will meet this criteria. Additionally the City may consider constructing facilities that could convey some of the storm runoff to either Lateral 2 or Lateral 2½ in case one of them is temporarily closed.

The City will come to agreement with TID relative to the amount of storm drainage each of their facilities can take and how they need to be operated for storm drainage purposes. Preliminary calculations completed for the draft City of Ceres Storm Drainage Master Plan indicate that there will probably be adequate capacity for disposing of runoff from the expansion area providing:

4. Normal operation includes the City using Lateral 2, Lateral 2½ and Faith Home Road Spill to dispose of storm drainage runoff.
5. Storm drainage runoff to Lateral 1 (which disposes into Lateral 2) is limited to approximately 10 cfs and all areas north of Hatch Road not using Lateral 1 dispose of storm drainage runoff into the Tuolumne River.
6. When use of the TID facilities is restricted, the amount of time to dispose of the detained storm drainage water be increased.

All of these conditions are considered in the draft City of Ceres Storm Drainage Master Plan.

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in new development without adequate system capacity either currently available or to be provided by new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

During the public review process, the residential holding capacity of the Land Use Diagram was reduced by approximately 10 percent. This reduction did not substantially change the infrastructure requirements; the numbers reported in this chapter are, therefore, the same as those reported in the Draft EIR (April 1996).

Within the Planning Area, storm drainage discharge volumes will increase as a result of increased impervious area caused by development. Most of the storm drainage in the area is ultimately disposed of in either the San Joaquin River or the Tuolumne River through TID irrigation facilities. Some of the runoff from the developed areas spills directly into the Tuolumne River through pipes or is disposed of in percolation basins. It is intended that the storm drainage for these developed areas will not generally change, with one exception. The percolation basin at the southwest corner of Blaker and Service Roads will ultimately empty into a disposal pump located on Lateral 2.

The capacity of the TID facilities that will be used to convey storm drainage to either the San Joaquin River (Ceres Main Canal, Laterals 1, 2 and 2 ½) or the Tuolumne River (Faith Home Road spill) are limited.

Recognizing that the TID system is limited in capacity the draft City of Ceres Storm Drainage Master Plan outlines steps that could be used to accommodate drainage from the Planning Area. These steps are generally as follows:

1. Divert a portion of the storm drainage now planned for disposal in the Ceres Main Canal to the Tuolumne River by using the TID Faith Home Road spill.
2. Free up capacity in Lateral 2 by disposing of north Ceres runoff into the Tuolumne River. This would lower the flow in Lateral 1 which spills into Lateral 2. Lateral 2 is one of the two canals available to Ceres for disposal of storm water runoff into the San Joaquin River.
3. Set up operational alternatives that would allow the City to use Lateral 2 and Lateral 2 ½ together in the normal condition when they were both available.
4. Make provisions for detaining storm water for a longer period during the condition when one of the Laterals or the Faith Home Road Spill had to be temporarily closed.

5. Have commercial detain their on site storm water runoff on site.
6. Industrial areas shall retain their stormwater on site.

These steps have been considered and preliminary calculations indicate that the storm drainage runoff from development under the General Plan can be accommodated when improvements conforming to general criteria included in this document are completed.

GENERAL PLAN POLICY RESPONSE

Storm Water Drainage

4.E.1 The City shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the in the city and immediately adjacent to the city in unincorporated Stanislaus County.

4.E.2. All drainage designs shall be in accordance with the accepted principles of civil engineering, the Stanislaus County Storm Drainage Design Manual, and City improvement standards.

4.E.3. New development shall have surface drainage disposal accommodated in one of the following ways:

- a. Positive drainage—positive drainage to a river, stream, creek, or other natural water course.
- b. Irrigation facility—drainage into an irrigation district facility, either by gravity or pumping, pursuant to the City - Turlock Irrigation District agreement.
- c. Drainage ponds—ponds, either in individual lots within a subdivision or in the case of larger developments, within a depressed portion of a common area.
- d. Drainage unit—use of french drains within depressed areas of the street right-of-way for those subdivisions or portions of subdivisions of such size that one of the solutions in subsections a, b, or c is not feasible, as determined by the City Engineer
- e. On-site drainage—drainage retained on-site within the development. Commercial development shall accommodate drainage on-site unless method described in subsections a or b above is available and the development participates in a system to address on-site drainage as approved by the City Engineer. All on-site industrial drainage shall remain on-site. The City shall encourage commercial and industrial development to integrate on-site storm drainage facilities with landscaping.

4.E.4. The City shall encourage project designs that minimize drainage concentrations and impervious coverage.

4.E.5. The City shall require appropriate mitigation for grading activities during the rainy season to avoid sedimentation of storm drainage facilities.

4.E.6. The City shall require projects that have significant impacts on the quality of surface water runoff to incorporate mitigation measures for water quality impacts related to urban runoff.

4.E.7. Future drainage system requirements shall comply with applicable state and federal pollutant discharge requirements.

4.E.8. The City shall seek to minimize operational complexities and maintenance requirements of the storm drainage system.

4.E.9. The City shall allow stormwater detention facilities to mitigate drainage impacts and reduce storm drainage system costs. To the extent practical, stormwater detention facilities should be designed for multiple purposes, including recreational and/or stormwater quality improvement.

4.E.10. The City shall consider using stormwater of adequate quality to replenish the local groundwater basin, restore wetlands and riparian habitat, and irrigate agricultural lands, or as open space or recreational enhancements.

4.E.11. The City shall, when necessary to meet federal stormwater quality requirements, establish a storm drain utility to address these requirements on a citywide basis.

4.9 The City shall update the Storm Drainage Master Plan based on the updated General Plan.

General Public Facilities and Services

4.A.1. Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction of those facilities. The City shall require dedication of land within newly developing areas for required public facilities, as allowed by law.

4.A.2. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. The City shall not approve new development where existing facilities are inadequate unless the following conditions are met:

a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and

b. The facilities improvements are consistent with the City's Public Facilities Plan and/or other functional plans for infrastructure or public facilities. Where oversized or out-of-sequence public facilities are required, reimbursement from the City or future developers,

depending on the circumstances, may be arranged in accordance with the City of Ceres' Public Facilities Fees Administrative Procedures.

4.A.3. The City shall require areawide plan proposals to include plans for development and financing of public facilities and services.

4.A.4. The City shall update the Public Facilities Plan and other functional plans for infrastructure or public facilities on a regular basis to ensure compliance with appropriate state and federal laws; incorporation of state of the art technology, and compatibility with changing land use policy.

4.A.5. The City shall provide for expansion of general government services (e.g., City administrative services) in connection with new development.

General Public Facilities and Services Funding

4.B.1. The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low-income housing, significant primary wage earner employment) and/or when alternative sources of funding can be identified to offset foregone revenues.

4.B.2. The City shall seek broad-based funding sources for public facilities and services that benefit both current and future residents of the City.

4.B.3. The City shall require preparation of a fiscal impact analysis for all areawide plans or significant general plan land use amendments. The analysis will examine the fiscal impacts on the City and other service providers that result from large-scale development. Where the fiscal impact study shows that the development enabled by an areawide plan will create an operating deficits, the City shall require a mechanism to fully mitigate the funding deficit.

4.2. The City will update the Public Facilities Plan based on the updated General Plan and updated infrastructure master plans.

4.3. The City will update its development fees based on the updated Public Facilities Plan.

IMPACTS

Development according to the General Plan will increase storm water runoff from urban development covering pervious surfaces such as dirt or fields with impervious surfaces such as roofs and pavement. The most substantial increases in runoff will occur on areas that are currently in agricultural production. This EIR describes drainage improvements needed to serve projected development under the General Plan. Policies and programs of the General Plan provide for the detailed storm drainage planning and expansion, development, and financing of new storm drainage facilities. The impact of the General Plan on drainage in Ceres would

therefore be less-than-significant. Discussions of potential impacts on water quality are included in the "Water Resources" section in Chapter 7 of this EIR.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary

5.4 LAW ENFORCEMENT

ENVIRONMENTAL SETTING

Chapter 6 of the General Plan Background Report describes existing law enforcement services in Ceres. The area is policed primarily by three agencies: The City of Ceres Department of Public Safety Police Division which is primarily responsible for policing inside the current city limits. The Stanislaus County Sheriff's Department which polices the unincorporated portions of the county adjacent to the City of Ceres. The California Highway Patrols primary responsibility is for the state and federal highways that are present in the Ceres vicinity.

Current City of Ceres Staff includes 34 sworn personnel, 16 non sworn personnel, and 42-50 volunteers. The city also has 8 reserve officers and two canines.

METHODOLOGY

Assumptions

1. As new development occurs, it will be annexed to the City and law enforcement services will be provided by the City of Ceres Department of Public Safety. The General Plan sets a policy standard of a four-minute maximum response time for life-threatening events. The needed staffing to achieve this standard will be evaluated quarterly. The resource and staffing arrangements necessary to meet this standard are unknown at this time. The current standard used by the City is a ratio of 1.5 sworn personnel per 1,000 population, although the City has been unable to meet this goal in recent years because of budget constraints. The City's current ratio is approximately 1.1 per 1,000 population. For the purposes of estimating the number of new law enforcement personnel that may be required, this EIR assumes that 1.0 to 1.5 sworn officer per 1,000 population will be needed to meet these standards.
2. The Stanislaus County Sheriff's Department will continue to provide services to the unincorporated area and the California Highway Patrol will be responsible for the freeways, state highways, and some County roadways, and will respond to accidents.
3. Additional equipment and personnel will be required as the city continues to grow. This will include additional equipment at the central Public Safety Facility downtown and new facilities to include community policing stations in connection with new fire stations.
4. The City will continue to participate in regional airborne law enforcement when available and motorcycle patrol units.

Thresholds of Significance

For the purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would generate demand for law enforcement services that would exceed the ability of the local law enforcement agency to comply with the response time goals included in the General Plan.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development under the Land Use Diagram will result in increased population and new industrial and commercial development, which will contribute to the need for additional police services.

Phase 1 Growth

Development within Phase 1 of the Urban Growth Area would accommodate approximately 35,600 new residents. The Policy Document establishes standards based on response times, with staffing requirements to be evaluated quarterly based on that needed to meet these response time standards. For the purposes of estimating the number of personnel that may be required, however, this EIR uses an assumption of between 1.0 to 1.5 sworn officers per 1,000 population to meet these standards. Using this general assumption, new growth would create a demand for another 35 to 52 sworn police officers. Additional commercial and industrial development would also require law enforcement services within Phase 1 of the Urban Growth Area. This would require additional equipment at the central Public Safety Facility, along with facilities and personnel at the new public safety facilities needed to meet fire and emergency response (see next section in this chapter).

Phase 2 Growth

Development within Phase 2 of the Urban Growth Area would accommodate approximately 11,000 additional residents. Using an assumption of 1.0 to 1.5 sworn officers per 1,000 population, development outside the city limits would require an additional 11 to 16 sworn personnel, along with additional expansion of equipment at the central Public Safety Facility and one or more additional community police stations.

GENERAL PLAN POLICY RESPONSE

Law Enforcement

4.G.1. The City shall, through adequate staffing and patrol arrangements, endeavor to maintain the minimum feasible response times for police calls. The City shall strive to achieve a maximum four minute response time for life-threatening events.

4.G.2. The City shall strive to maintain conditions so that officers have a minimum 40 percent patrol time to ensure that law enforcement can play a proactive, rather than reactive, role.

4.G.4. Within the City's overall budgetary constraints, the City shall provide police facilities (including patrol and other vehicles, necessary equipment, and support personnel) sufficient to maintain its service standards.

4.G.5. The City shall require new development to develop or fund police facilities, personnel, and operations and maintenance that, at a minimum, maintain the above standards.

4.G.6. The City shall pursue the development of an 800 megahertz radio system to ensure efficient dispatch and response time. New development shall be required to contribute its fair share in paying the costs of this system.

4.G.7. The City shall promote public safety programs, including neighborhood watch, child identification and fingerprinting, and other public education efforts.

4.G.8. The City shall consider public safety issues in all aspects of public facility, commercial, and residential project design, including crime prevention through environmental design.

4.11 The City shall monitor response times and patrol time to review staffing requirements necessary to maintain established levels of service.

General Public Facilities and Services

4.A.1. Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction of those facilities. The City shall require dedication of land within newly developing areas for required public facilities, as allowed by law.

4.A.2. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. The City shall not approve new development where existing facilities are inadequate unless the following conditions are met:

a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and

b. The facilities improvements are consistent with the City's Public Facilities Plan and/or other functional plans for infrastructure or public facilities. Where oversized or out-of-sequence public facilities are required, reimbursement from the City or future developers, depending on the circumstances, may be arranged in accordance with the City of Ceres' Public Facilities Fees Administrative Procedures.

4.A.3. The City shall require areawide plan proposals to include plans for development and financing of public facilities and services.

4.A.4. The City shall update the Public Facilities Plan and other functional plans for infrastructure or public facilities on a regular basis to ensure compliance with appropriate state

and federal laws; incorporation of state of the art technology, and compatibility with changing land use policy.

4.A.5. The City shall provide for expansion of general government services (e.g., City administrative services) in connection with new development.

General Public Facilities and Services Funding

4.B.1. The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low-income housing, significant primary wage earner employment) and/or when alternative sources of funding can be identified to offset foregone revenues.

4.B.2. The City shall seek broad-based funding sources for public facilities and services that benefit both current and future residents of the City.

4.B.3. The City shall require preparation of a fiscal impact analysis for all areawide plans or significant general plan land use amendments. The analysis will examine the fiscal impacts on the City and other service providers that result from large-scale development. Where the fiscal impact study shows that the development enabled by an areawide plan will create an operating deficits, the City shall require a mechanism to fully mitigate the funding deficit.

4.2. The City will update the Public Facilities Plan based on the updated General Plan and updated infrastructure plans.

4.3. The City will update its development fees based on the updated Public Facilities Plan.

The policies in this section address public safety by setting standards for police service and by providing for other public safety programs and addressing the design of new residential and commercial development and remodels and public facilities such as parks and schools to maximize public safety.

IMPACTS

Using general estimates of staffing that may be required to meet the General Plan response time standards, new development within the Urban Growth Area will create the demand for additional law enforcement services, totaling approximately 46 to 68 sworn personnel. The General Plan Policy Document contains policies aimed at reducing demand for police services and endorses staffing goals and minimum response times to ensure these goals. The impacts on police equipment and operations are required to be addressed in connection with master plans for new development outside the existing city limits. Policies also address impacts on funding of personnel and operations costs through fiscal studies and mitigation.

The impact of the General Plan on police services would, therefore, be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

5.5 FIRE PROTECTION

ENVIRONMENTAL SETTING

Chapter 6 of the Background Report describes existing fire protection services in the City of Ceres. The City of Ceres Department of Public Safety Emergency Services Division provides fire protection and emergency medical services within the city limits and selected surrounding areas. Within the Planning Area, the average response time from the nearest fire station within the different planning sections is approximately three to five minutes.

The department currently operates out of two stations within the Ceres area. Station No. 1 is located in the downtown area of the city while Station No. 2 is located northwest of the existing city limits. The City of Ceres Emergency Services Division currently has a staff that includes a Commander and two Battalion Chiefs at the staff level along with one secretary, three fire captains, and nine firefighters at the station level. There are currently 30 volunteers that are trained by the department.

In 1994 the Fire Department responded to 2,521 calls, 1,545 of which were emergency medical aid calls, 546 were fire calls, and 430 were categorized as “other”. In addition to the available equipment discussed in the Background Report, the department will be getting two additional engine pumpers that will replace two of the existing engine pumpers currently on line. There have been no changes or updates regarding the ISO Ratings for the fire protection districts.

The Planning Area also includes territory within the Ceres, Hughson, Industrial, Keyes, and Westport Fire Protection Districts.

METHODOLOGY

Assumptions

1. The City of Ceres Emergency Services Division will serve all new development within the city limit boundary and the established fire protection district boundaries.
2. Volunteers are considered to be equivalent to 0.25 paid personnel. Future needs will be addressed through a combination of volunteer and paid personnel.

Threshold of Significance

For the purpose of this EIR, an impact is considered significant if adoption or implementation of the General Plan would generate demand for fire protection services that would exceed the

ability of the Ceres Emergency Services Division to comply with fire protection and response time goals included in the General Plan.

IMPLICATIONS OF THE LAND USE DIAGRAM

Fire service is similar to police service in terms of the need to maintain a 24-hour response capability and the need to minimize response times to calls. The City currently relies to a great extent on volunteers for emergency response; as the City grows, however, it may have difficulty relying to the same extent on volunteers and will require a higher ratio of paid personnel. As the City grows additional fire stations will also be required to maintain minimum response times.

As new development within the Urban Growth Area is annexed to the city, territory will be removed from the surrounding Ceres and Westport Fire Protection Districts.

Phase 1 Growth

Continued development within the Phase 1 of the Urban Growth Area would accommodate approximately 35,600 new residents, creating a demand for additional fire protection and emergency medical personnel. Assuming an average of 0.50 firefighters per 1,000 population would be required to meet stated response times, development within Phase 1 of the Urban Growth Area would require a total addition to the department of 17 firefighters, along with additional equipment. Additional public safety facility sites on the western and eastern portions of the city would be required to provide adequate response time to the expanded urban area. The general location of the new facilities are shown in Figure 5-4.

Phase 2 Growth

Development within the Phase 2 of the Urban Growth Area would accommodate approximately 11,000 additional residents. Assuming an average of 0.50 firefighters per 1,000 population would be required to meet stated response times, development within the Phase 2 would require a total addition to the City of Ceres Emergency Services Division of 6 firefighters, along with additional equipment.

GENERAL PLAN POLICY RESPONSE

The General Plan Policy Document includes the following policies concerning fire protection.

Fire Protection/Emergency Services

4.H.1. The City shall attempt to maintain an ISO (Insurance Service Organization) rating of 4 or better.

4.H.2. The City shall, through adequate staffing and facilities, endeavor to maintain the minimum feasible response times for fire calls. To this end, the City shall attempt to maintain a response time of two minutes or less for emergency medical response and six minutes or less for fire suppression calls.

4.H.3. The City shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.

4.H.4. The City shall identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses.

4.H.5. The City shall implement ordinances through project review to control fire losses and fire protection costs through continued use of automatic fire detection, control, and suppression systems.

4.H.6. The City shall only approve new multi-story buildings over three stories in height if adequate firefighting equipment to serve buildings higher than three stories can be provided.

General Public Facilities and Services

4.A.1. Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction of those facilities. The City shall require dedication of land within newly developing areas for required public facilities, as allowed by law.

4.A.2. The City shall ensure through the development review process that adequate public facilities and services are available to serve new development. The City shall not approve new development where existing facilities are inadequate unless the following conditions are met:

a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and

b. The facilities improvements are consistent with the City's Public Facilities Plan and/or other functional plans for infrastructure or public facilities. Where oversized or out-of-sequence public facilities are required, reimbursement from the City or future developers, depending on the circumstances, may be arranged in accordance with the City of Ceres' Public Facilities Fees Administrative Procedures.

4.A.3. The City shall require areawide plan proposals to include plans for development and financing of public facilities and services.

4.A.4. The City shall update the Public Facilities Plan and other functional plans for infrastructure or public facilities on a regular basis to ensure compliance with appropriate state and federal laws; incorporation of state of the art technology, and compatibility with changing land use policy.

4.A.5. The City shall provide for expansion of general government services (e.g., City administrative services) in connection with new development.

General Public Facilities and Services Funding

4.B.1. The City shall require, to the extent legally possible, that new development pays the cost of providing new public facilities and services and/or the costs for upgrading of all existing facilities that it uses, based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low-income housing, significant primary wage earner employment) and/or when alternative sources of funding can be identified to offset foregone revenues.

4.B.2. The City shall seek broad-based funding sources for public facilities and services that benefit both current and future residents of the City.

4.B.3. The City shall require preparation of a fiscal impact analysis for all areawide plans or significant general plan land use amendments. The analysis will examine the fiscal impacts on the City and other service providers that result from large-scale development. Where the fiscal impact study shows that the development enabled by an areawide plan will create an operating deficits, the City shall require a mechanism to fully mitigate the funding deficit.

4.2. The City will update the Public Facilities Plan based on the updated General Plan and updated infrastructure master plans.

4.3. The City will update its development fees based on the updated Public Facilities Plan.

These policies establish fire protection goals for response time and provide for continued provisions for expansion of the City's fire protection capability.

IMPACTS

Population and employment growth in Ceres will create the demand for additional fire protection services, totaling approximately 23 firefighters. Additional support personnel will also be required. The General Plan Policy Document contains policies aimed at reducing fire hazards and endorses fire safety standards and minimum response times. Additional development within the Planning Area includes a balance of commercial and industrial development to residential which should adequately provide for costs for providing increased firefighting personnel and equipment.

As new development within the Urban Growth Area is annexed to the city, territory will be removed from the surrounding Ceres and Westport Fire Protection Districts, thus reducing demand for services by these districts. The property tax increment used to fund these districts will also be reduced.

The impacts on fire protection equipment and operations are required to be addressed in connection with areawide plans for new residential development outside the existing city limits. The impact of the General Plan on fire protection services would, therefore, be less-than-significant. Fire safety is also discussed in the "Fire Hazards" section in Chapter 8 of this EIR.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

5.6 SOLID WASTE COLLECTION AND DISPOSAL

ENVIRONMENTAL SETTING

Chapter 6.7 of the Background Report describes existing solid waste collection and disposal services in Ceres. The City of Ceres has a franchise agreement with Bertolotti Ceres Disposal for refuse collection services and weekly curbside collection of recyclable materials to all single-family, multi-family, and mobile homes in the city limits. Currently, Bertolotti Ceres Disposal provides service to over 8,000 residences in the Ceres area. These services are funded through refuse service fees which are based upon the container size (60 or 90 gallon wastewheeler). Commercial and industrial solid waste disposal are also provided by Bertolotti Ceres Disposal. The rates vary depending on the size of the container and frequency of pick up.

Local solid waste management planning is governed by the Integrated Waste Management Act of 1989. The Act established strict mandates for local agencies to achieve a 25 percent reduction in solid waste disposed of by 1995 and a 50 percent reduction by the year 2000. Solid waste management policy is specifically discussed in the City's Source Reduction and Recycling Element (SRRE) and the County Integrated Waste Management Plan. These documents discuss integrated waste management plans in relation to the cities' and county's source reduction, recycling elements, and a summary of significant waste management problems for the county.

According to the Ceres Source Reduction and Recycling Element, the city of Ceres generated 33,773 tons of solid waste in 1990. Of that amount, approximately 19 percent was recycled, reused, or composted. The remaining 27,400 tons were disposed of at the Waste to Energy Plant or Fink Road Landfill. The four waste streams identified by the Solid Waste Generation Analysis (SWGA) and their applicable percentage of the total waste generated within Stanislaus County in 1990 include Residential (41.7%), Industrial (21.6%), Commercial (20.9%), and Self Haul (15.8%).

METHODOLOGY

Assumptions

1. The Fink Road Landfill has a capacity of approximately 22 years in the Class III Cell and capacity in the Ash Cell for another 30 years.
2. The analysis assumes that the City will continue to implement the goals of the SRRE in an effort to increase waste diversion to 50 percent in the year 2000.
3. The analysis assumes that the county will continue to implement Countywide Integrated Waste Management Plan.

4. Average waste generation rate is assumed to be approximately 4 pounds per capita per day, based on current generation rates, before any source reduction, reuse, or recycling. Commercial and industrial wastes are assumed to increase from 40 percent of Ceres' waste stream in 1990 to 50 percent in 2015.

Thresholds of Significance

For the purpose of this EIR, an impact is considered significant if adoption or implementation of the General Plan would lead to waste generation that exceeded the standards established by the City of Ceres SRRE, or would deplete the capacity of the Fink Road landfill at a significantly higher rate than projected by the County.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development within the Urban Growth Area of approximately 16,000 residential units would result in increasing waste generations from residential, commercial, and industrial development. This would result in generation of approximately 70,000 tons of waste per year at current generation rates.

With the City's commitment to recycling and reducing wastes from all components, this waste should be accommodated within the capacity of the Fink Road Landfill and waste-to-energy facility.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes the following policies and programs concerning solid waste collection, disposal, source reduction, and recycling.

Solid Waste Collection and Disposal

4.F.1. The City shall require waste collection in all new development.

4.F1. .2. The City shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

4.F2. .3. The City shall require that all new development complies with applicable provisions of the City of Ceres Source Reduction and Recycling Element and the Stanislaus County Integrated Waste Management Plan.

4.F.4. The City shall encourage development of regional and community-based recycling facilities in heavy commercial and industrial areas.

4.F.5. The City shall require screening of waste and recycling containers in commercial, industrial, and multi-family residential areas.

4.F.6. The City shall encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.

4.F.7. The City shall continue to work with Stanislaus County in securing additional waste disposal capacity.

These policies and program seek to reduce the amount of waste produced through source reduction, reuse, and recycling, and to ensure safe disposal of waste. Solid waste management policy is specifically addressed in the City's Source Reduction and Recycling Element and the Countywide Integrated Waste Management Plan.

IMPACTS

Development within the Urban Growth Area would result in 46,400 new residents as well as significant industrial and commercial growth. This would result in generation of approximately 70,000 tons of waste per year. If the City increases its waste diversion from 20 percent in 1990 to 50 percent by the year 2000 as required by the SRRE, the additional waste requiring disposal would be reduced to 35,000 tons per year.

Given the significant quantities of commercial and industrial development and since the ratio of commercial and industrial development to residential development is projected to be even higher, the City should also focus its attention on reducing commercial and industrial solid waste generation.

The Fink Road Landfill has adequate capacity for the City of Ceres' projected quantities of wastes. Growth under the General Plan is generally consistent with the County's growth projections in projecting the life of the landfill. Therefore, the solid waste impacts of the General Plan would be less-than-significant.

According to County projections, however, the Fink Road landfill will be close to its current capacity the end of the time frame of the General Plan. Development within Ceres will contribute cumulatively to exhausting the capacity of the landfill. During 1995, the Countywide Siting Element Steering Committee studied a number of sites for future development of solid waste disposal facilities. After conducting an analysis of the potential sites, the Committee recommended that the Fink Road Landfill be expanded to meet future needs. All of the cities in the county and Stanislaus County are in agreement. Each jurisdiction approved and adopted the 1995 Countywide Siting Element. Stanislaus County is in the process of trying to proceed with the purchase of additional land adjacent to the Fink Road Landfill. The land is currently on the market for sale.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

5.7 UTILITIES

ENVIRONMENTAL SETTING

Chapter 6 of the Background Report describes existing utility services in the City of Ceres. The following summarizes the existing environmental setting for gas services, electric services, telephone and cable television in Ceres.

Gas Service

Pacific Gas and Electric Company provides natural gas to the City of Ceres. Ceres is served by a network of 6 and 8 inch transmission mains with the main trunkline being a 26 inch line that is located adjacent to Interstate 5. The present transmission line is sufficient for any future growth within the Planning Area. However, PG&E does anticipate a need to reinforce their existing small-scale distribution mains on an as-needed basis.

Electrical Service

The Turlock Irrigation District provides electricity to the City of Ceres. The main source of power is from the hydroelectric power which is generated at the La Grange and Don Pedro Dams. From this source there are currently ten transmission lines serving the Ceres area. These transmission lines supply four substations in the Ceres area which are detailed in the Background Report.

Telephone Service

Pacific Bell provides telephone service within the City of Ceres. Pacific Bell is required to provide telephone services for growth and future development in accordance with the requirements of, and at the rates and charges specified in its scheduled tariffs on file with the California Public Utilities Commission.

Cable Service

Marcus Cable provides information and entertainment within the Ceres area in the form of basic (off-air broadcast, local origination and satellite programming) and premium (e.g. HBO, Showtime, Pay-Per-View) cable television services. Marcus continuously adds to the system as new housing is constructed.

METHODOLOGY

Assumptions

The current service providers will continue to be responsible for serving future development as areas are annexed to the city of Ceres.

Thresholds of Significance

For the purpose of this EIR, an impact is considered significant if adoption or implementation of the General Plan would create demand that exceeded the current or feasibly expanded capacity of existing utility service providers.

IMPLICATIONS OF THE LAND USE DIAGRAM

Development under the General Plan would require extension of gas and electrical lines and expansion of existing substations. Additional telephone and cable television lines would also be required.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes the following policies to provide for the development and proper siting of utility facilities.

Public Utilities

4.L.1. The City shall communicate its major development plans with utility companies and coordinate planning of extension of these facilities.

4.L.2. The City shall require undergrounding of utility lines in new development and as areas are redeveloped, except where infeasible for operational or financial reasons.

4.L1. .3. The City shall promote technological improvements and upgrading of utility services in Ceres.

IMPACTS

Development under the General Plan would require extensions and improvements to electric, gas, and telephone lines. Expansion of existing substations would also be required. Extensions and improvements to electrical, gas, cable television, and telephone lines would be funded by new development as it occurs and specific improvements and extensions would be addressed in the areawide planning process. The cost for expansion of capital facilities are spread over the entire service area, as regulated by the California Public Utilities Commission.

The impact of the General Plan on gas, electricity, and telephone service would therefore be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

5.8 SCHOOLS

ENVIRONMENTAL SETTING

Chapter 6 of the General Plan Background Report describes the existing educational facilities and programs in the City of Ceres. The Ceres Unified School District provides public educational services to the residents of Ceres and most of the Planning Area. For the 1994-1995 school year, CUSD enrollment was 8,639 with a capacity of 8,772. Most of the population served resided within the Planning Area. Currently, three elementary schools are operating on a year round schedule.

Modesto City Schools provide services to three areas within the Planning Area.

1. The 600-acre area bounded by East Hatch Road, South 7th Street, the Tuolumne River, and Musick Avenue. This area lies within Phase 1 of the Urban Growth Area.
2. 1,280 acres bounded by Service Road, South Carpenter Road, West Whitmore Avenue, and Crows Landing Road. This area can be divided into three smaller areas: the eastern 320 acres are designated Community Commercial, Office, and Light Industrial in Phase 2 of the Urban Growth Area; the middle 410 acres are designated Residential Reserve; and the western 640 acres are designated Agriculture.
3. The area bounded by West Whitmore Avenue, South Carpenter Road, the Tuolumne River, State Route 99, and Morgan Road. This area is designated Adjacent Urban and is within the City of Modesto's sphere of influence.

The remaining land in the Planning Area is served by the Ceres Unified School District.

METHODOLOGY

Assumptions

1. The Ceres Unified School District (CUSD) and Modesto City Schools will continue to provide public educational services within the Planning Area. Most of the new housing development within the Planning Area will take place within the CUSD.
2. The Ceres Unified School District will utilize the following sizes as a guideline for future site selection.

ASSUMED SITE SIZE REQUIREMENTS

Level	Enrollment	Site Size
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Elementary School (K-6, K-8)	Up to 500 students	10 acres
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Middle School (6-8, 7-8, 7-9)	Up to 1,000 students	20 acres
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High School (10-12, 9-12)	Up to 2,000 students	40 to 50 acres
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Source: School Site Analysis and Development Handbook and Ceres Unified School District

3. The Ceres Unified School District will continue to utilize the following generation rates per unit to accommodate and plan for future residential growth within the districts boundary. These figures are utilized for all types and sizes of housing types.

- | | | |
|----|-----------------------------|---------------------------------|
| a. | Elementary School | 0.42 students per dwelling unit |
| b. | Junior High / Middle School | 0.10 students per dwelling unit |
| c. | High School | 0.17 students per dwelling unit |

4. The Ceres Unified School District may need to implement year-round scheduling for all K-6 schools to alleviate impacts associated with growth and has committed to do so.

5. The Ceres Unified School District will continue to collect development fees and apply for state funding to finance new construction.

6. Modesto City Schools will continue to collect development fees to mitigate school impacts caused by new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development in Ceres will result in increased student enrollment and require additional schools within the Ceres Unified School District as well as additional classrooms within the Modesto City and High School Districts.

Phase 1 Growth

Development of the anticipated 12,400 residential units within Phase 1 of the Urban Growth Area will generate an additional 8,600 students. From that total 5,200 will be at the elementary level, 1,240 will be at the junior high/ middle school level, and 2,100 will be at the high school level. This will require the development of six new elementary schools, assuming multi-track year round programs; a new junior high/middle school, and a new high school. Most of the new students will be within the Ceres Unified School District; potentially, a total of about 300 new students could be generated within the Modesto City and High School Districts. This would require approximately 10 classrooms at 3 sites (6 elementary, 1 middle school, and 3 high school).

As of July 1996, the CUSD is researching the best location for a second high school.

Phase 2 Growth

Development of the 3,600 residential units within Phase 2 of the Urban Growth Area will generate an additional 2,500 students within the Ceres Unified School District. From that total, 1,500 will be generated at the elementary level, 360 will be generated at the junior high/middle school level, and 600 at the high school level. This will necessitate an additional two new elementary schools, and expansion of junior high and high school facilities.

Private Schools

New development within the Planning Area could increase the demand for private primary and education facilities in the City of Ceres. Since these schools are privately funded it can be assumed that any increase in demand will be paid for by the users.

Colleges

New development within the Planning Area will also increase the demand for post secondary education . This could effect Modesto Junior College and California State University Stanislaus.

GENERAL PLAN POLICY RESPONSE

Education

4.I.1. The City should continue to assist the school districts in providing quality education facilities that will accommodate projected student growth.

4.I.2. The City and the school districts should work together in using existing school facilities for non-school-related and child care activities.

4.I.3. The City shall support the development of appropriately-located private school facilities to provide additional educational facilities in Ceres.

School Siting and Financing

4.J.1.1. The City shall work cooperatively with the school districts in monitoring housing, population, and school enrollment trends and in planning for future school facility needs, and shall assist the district in locating appropriate sites for new schools in the Planning Area.

4.J2. .2. The City's land use planning should be coordinated with the planning of school facilities. The City and the school districts should work together in the early stages of the areawide planning and school site selection processes. As needed, the City should reserve school sites in areawide plans to accommodate school district needs.

4.J3. .3. The City should plan and approve residential uses in those areas that are most accessible to school sites in order to enhance neighborhoods, minimize transportation requirements and costs, and minimize safety problems.

4.J4. .4. The City shall encourage siting school facilities so they serve as focal points within the neighborhoods and the community.

4.J5. .5. The City shall encourage siting schools in areas with safe and convenient pedestrian and bicycle access.

4.J.6.6. The City shall encourage the design and improvement of school facilities to provide adequate off-street parking and areas for student pick-up and drop-off to minimize safety problems.

4.J7. .7. The City will work closely with the School District to secure adequate funding for new school facilities. To this end, the City will continue its agreement with the Ceres Unified School District for collecting development fees.

4.J8. .8. The City shall support enactment of state legislation to finance the construction of new schools and shall support the modification of state laws and regulations to improve the funding of new school sites and facilities.

IMPACTS

Public Schools

Development within the Urban Growth Area will create a need for eight additional elementary schools, one or two new junior high/middle schools, and one or two new high schools, based on state and CUSD school siting criteria. The exact number of schools and locations will be determined as new growth occurs. Most of this new development will occur within the Ceres Unified School District, although some additional enrollment will occur in the Modesto City School Districts. While projected enrollment increases in Modesto City Schools are not expected to be large enough to require the construction of new schools, they will contribute to cumulative increases in the use of existing school sites in the area and will require development of additional classroom space to avoid overcrowding. The General Plan provides for negotiating an agreement with Modesto City Schools to identify the appropriate mitigation.

The Ceres Unified School District will continue to collect development fees and apply for State funding to accommodate new growth. The district may also need to implement year-round scheduling as necessary to reduce the need for additional schools. The City and the School District have negotiated an agreement for addressing school mitigation in connection with new development. (Resolution 94-111). The impact on schools from development under the General Plan is therefore considered less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

5.9 LIBRARY

ENVIRONMENTAL SETTING

The Stanislaus County Libraries serve the residents of Stanislaus County. There is one branch library located in the city that is open for 23 hours per week. The branch library contains approximately 30,000 volumes and provides reference and information assistance to patrons.

METHODOLOGY

For the purpose of analysis in this EIR, the following Stanislaus County standards have been applied to new development:

1. 0.4 square feet per capita
2. 2.1 volumes per capita

Thresholds of Significance

For the purpose of this EIR, an impact is considered significant if adoption or implementation of the General Plan would exceed the demand for library services that currently exist or would be developed in conjunction with new development.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development under the General Plan will create the demand for additional library services. Table 5-2 shows the requirements for additional library space and volumes from new development.

TABLE 5-2

ADDITIONAL LIBRARY DEMAND FROM NEW DEVELOPMENT

	Phase 1	Phase 2	Total Urban Growth Area
Additional Population	35,600	10,800	46,400
Additional Space Required	14,240	4,320	18,560
Additional Volumes Required	74,760	22,680	97,440

GENERAL PLAN POLICY RESPONSE

The following General Plan policies address library services:

Library

4.K.1. The City shall continue to support a high level of funding for library services.

4.K.2. The City shall require new development to contribute its fair share to the development of additional library facilities.

IMPACTS

The growth under the General Plan will create a demand for an additional 22,000 square feet of library space and an additional 114,000 volumes for the Urban Growth Area, along with additional staffing and other support materials. The Policy Document does not address how additional library space will be developed; whether this will be through expansion of or development of a single centralized location, or through one or more additional branch libraries, which could be jointly developed with new school facilities.

The General Plan supports the development of additional library materials and supplies, and the ¼ cent sales tax dedicated to library services will further address the need for additional library services. The impact of the General Plan on library services is considered less than significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs included in the Policy Document are necessary. The General Plan could be revised to establish a service level standard of volumes per capita in order to more clearly assess impacts and provide funding for additional library materials that would be required. In addition, locational and thresholds for development of branches of the library could be established to clarify the requirements and to reserve sites in connection with new development.

5.10 OTHER FACILITIES AND SERVICES

Development within the Urban Growth Area will also create additional demands on other services provided by other agencies, including various County services (e.g., social services, criminal justice) and other special districts (e.g., Turlock Irrigation District and Turlock Mosquito Abatement District). Depending on the nature of the special district, development under the General Plan will increase service requirements, or in the case of districts such as the Turlock Irrigation District, will remove territory from the district upon annexation by the city.

Funding for these services is provided by a variety of sources (primarily property taxes and state subventions), which have become increasingly limited. The General Plan provides for fiscal analysis and mitigation of funding of City services, but does not address County or other special district funding, with the exception of schools. Section 15131 of the CEQA Guidelines states, however, that “(a) Economic or social effects of a project shall not be treated as significant effects on the environment.” Therefore, the impact on other facilities and services is considered less-than-significant.

CHAPTER 6

RECREATIONAL AND CULTURAL RESOURCES

This chapter assesses the potential implications of development under the General Plan on Ceres' recreational and cultural resources.

6.1 PARKS AND RECREATION

This section assesses the potential effects of development under the General Plan on Ceres' parks and recreational resources, focusing on how new development and associated population growth will affect the demand for recreational facilities and services.

ENVIRONMENTAL SETTING

Parks in Ceres are operated and maintained by the City. As of 1995, the City of Ceres operates 10 parks and recreational facilities, comprising a total of approximately 63.5 acres. The City owns an additional 5 acres of park land that has not been developed. There is an additional 20 acres within the Urban Growth Area owned by other agencies. It has been the City's policy to locate parks adjacent to public school sites whenever possible. The City classifies existing parks as Neighborhood Parks, Community Parks, and Regional Parks. The location and characteristics of current facilities are described in Chapter 7 of the General Plan Background Report.

The City of Ceres offers a variety of youth and adult activities. These programs are described in Chapter 7 of the General Plan Background Report.

METHODOLOGY

According to Appendix G of the CEQA Guidelines, a project will normally have a significant impact on the environment if it conflicts with established recreational uses in the area. For the purpose of this EIR, an impact is considered significant if adoption or implementation of the General Plan would conflict with recreational uses in the city or if it would create unmet demand for parks and recreational services.

Assumptions

The following assumptions were used in assessing the impact of development under the General Plan on recreational facilities in the City of Ceres:

1. Existing deficiencies based on the City of Ceres' existing or proposed recreation standards are not considered an impact of new development under the General Plan.
2. Regional parks and community parks are assumed to be community wide facilities. Neighborhood parks are generally assumed to serve smaller areas.

3. City residents will continue to use school facilities for recreational purposes and new parks may be developed jointly with schools. For the purposes of assessments for new development, however, the acreage standard of the General Plan will apply to new City parkland or the part of the joint facility that is a City park.

Thresholds of Significance

For purposes of this EIR, an impact on park and recreational facilities is considered significant if new development creates demands for park and recreational facilities that cannot be met. These include the following park acreage standards:

- 1.6 acres per 1,000 population for Neighborhood Park
- 2.4 acres per 1,000 population for Community Park

IMPLICATIONS OF THE LAND USE DIAGRAM

The General Plan includes a set of park standards that require less park land than the existing Open Space and Agricultural Element's stated standard of 5 acres per 1,000 population; this reflects an adjustment in the way in which school facilities are credited toward meeting that standards. Rather than including school facilities as credit toward the City park standard, the City proposes to apply a lower standard and assumes that the additional 1 acre will be met with school facilities without the need to account for changes in school property.

Table 6-1 applies the parkland requirements of the General Plan to the existing population in Ceres.

TABLE 6-1

RELATIONSHIP OF EXISTING PARKLAND TO GENERAL PLAN STANDARDS

Category	General Plan Standard (Acres per 1,000 Pop.)				Needed to Satisfy General
Plan Standard (Acres)	Existing (Acres)*	Surplus or (Deficit)	Acres**		
Neighborhood Park	1.6	48	41.0	(7.0)	
Community Park	2.4	72	27.4	(44.6)	
Total	4.0	120	68.4	(51.6)	

*Includes existing parks and planned new 5-acre park

**Note that the City has collected development fees that have not yet been used to acquire park property that would be applied to the deficit shown in this table

City open space needs are also provided through participation in the Tuolumne River Regional Park.

This EIR analysis focuses on the impacts of new development; any existing deficit is not considered an impact of the General Plan. If the City chooses to address the existing park deficit, however, it would require additional land that would be removed from the land inventory available to accommodate new (residential and non-residential) development.

Table 6-2 shows the acreage of improved parkland needed to accommodate the increase in population provided for by the General Plan.

TABLE 6-2

ADDITIONAL PARKLAND REQUIRED TO SERVE NEW DEVELOPMENT UNDER THE GENERAL PLAN

Category	General Plan Standard (Acres per 1,000 pop.)		New Development within
Urban Growth Area (Acres)	Number of New Parks*		
Neighborhood Park	1.6	74	8 to 15
Community Park	2.4	111	3
Total	4.0	185	11 to 18

*Assumes 5 to 10 acres for neighborhood parks and 40 to 50 acres for community parks

GENERAL POLICY RESPONSE

Several sections of the Policy Document include policies and programs related to the provisions for recreation and parks and the preservation and enhancement of recreational opportunities. The following policies and programs address the implications of the Land Use diagram on recreation and parks:

Parks and Recreation

5.A1. The City shall continue to develop and expand its park system, to include a balance of passive and active recreational opportunities.

5.A2. The City shall strive to achieve the following standards for the development of park facilities:

Facility Type	Size	Standard
Neighborhood Park	5 to 10 acres	1.4 acres/1,000 population
Community Park	40 to 60 acres	2.6 acres/1,000 population

Joint use of City parks as drainage detention basins will be permitted, with the park as the primary use. Joint use of parks with and adjacent to schools will also be encouraged.

5.A3. Neighborhood parks should serve as the recreational and social focus of the neighborhood, and should include facilities for both active and passive recreation activities. Neighborhood parks should be easily accessible to the neighborhood via trails, bikeways, sidewalks, or low-volume residential streets.

5.A4. Community parks should focus on meeting the recreational needs of large sections of the community and allow for group activities and other recreational opportunities not feasible at the

neighborhood level. Community parks should be developed with a balance of active and passive recreation activities.

5.A5. The City shall pursue the development of community parks to serve citywide needs. The first priority for development of a new community park will be in the eastern part of the Planning Area; other locations will also be identified.

5.A6. The City shall investigate the potential public use of canal rights-of-way and the reservation of selected adjacent sites for use as greenbelts or recreation corridors.

5.A7. The City shall continue to cooperate with Stanislaus County and the City of Modesto in the development of the Tuolumne River Regional Park.

5.A8. The City shall consider the following factors in the design of new parks:

- a. Safety
- b. Security
- c. Maintenance
- d. Accessibility by various means of transportation
- e. Landscaping complimentary to the surrounding environment
- f. Travel distance of users
- g. Passive vs. active use areas
- h. Restroom facilities
- i. Citizen input
- j. Adequacy of off-street parking
- k. Flexibility for programming activities
- l. Casualty collection points for rotocraft

5.A9. The City shall continue to cooperate with the public and quasi-public agencies in the joint development, maintenance, and use of facilities. The City shall explore additional partnerships for development of regional youth and adult sports facilities and recreation programs. To this end, the City shall continue the joint use agreements with the school district for the utilization of parks and school facilities.

5.A10. The City shall encourage the establishment or joint development of commercial or private recreation facilities within the Ceres area.

5.A11. The City shall either pursue the development of a municipal golf course or assist in the private development of a new public golf course for the enjoyment of Ceres citizens.

5.A12. The City shall promote the development of youth sports facilities adjacent to schools and/or close to residential areas of the city.

5.A13. The City shall ensure that recreation facilities are sited to minimize negative impacts on surrounding residential neighborhoods (i.e., parking, night lighting, excessive noise).

5.B14. The City shall maintain an ongoing emphasis on youth and senior citizen programs and services, especially those that have positive educational and social influences on youth at risk for illegal, anti-social, or unhealthy behavior.

5.1 The City shall prepare a Parks Master Plan to identify locations of major parks and recreational facilities, specific criteria and standards for the development of sports and recreational facilities, identification of funding sources for the development and maintenance of parks and open space resources.

Open Space for the Preservation of Natural Resources

6.E.4. The City shall encourage the development of natural open space areas at the regional, community, and neighborhood parks.

6.E.5. The City shall plan and establish natural open space parkland as a part of the overall City park system, including its participation in the Tuolumne River Regional Park system and other areas where appropriate.

These policies set standards for new parks and recreation facilities and provide for their development.

IMPACTS

New development within the Urban Growth Area would create the demand for an additional 87 acres of neighborhood parks and 130 acres of community parks. Policies of the General Plan require new development to finance needed park facilities, and to create a mechanism for their maintenance. General locations of new neighborhood parks are shown on the Land Use Diagram (Figure 1-2) and possible locations of new community parks are shown in Figure 6-1. Precise locations will be determined in connection with new development and City acquisition of park land. Subsequent environmental review will be conducted on specific park locations prior to their development. The impact of the General Plan on parks and recreation facilities is considered less than significant.

MITIGATION MEASURES

No mitigation measures beyond policies and programs included in the Policy Document are necessary.

6.2 HISTORIC AND ARCHAEOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Historic Resources

Chapter 7 of the General Plan Background Report summarizes Ceres' history and includes a listing of structures considered to be potentially historically significant. In addition to the Daniel

Whitmore House, which is on the National Register of Historic Places, there are a number of structures Ceres that are historically significant on a local scale. These include homes built in the early 1900s, churches, meeting halls, and other buildings and sites.

Archaeological Resources

The Central California Information Center of the California Archaeological Inventory completed a record search of the Planning Area in December 1993. Results of the search revealed that there are no recorded archaeological sites in the Planning Area. There have been 12 cultural resource surveys conducted in the Planning Area, the largest of which is the West Ceres Annexation Area. All of the surveys had negative results. Given the small number of surveys performed in the Planning Area, however, it is difficult to assess the cultural resource potential.

METHODOLOGY

The analysis was conducted qualitatively by considering known and anticipated cultural resources and locations described in the Background Report in relationship to the Land Use Diagram.

Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, impacts are considered significant if the General Plan would do any of the following:

- Disrupt or adversely affect a prehistoric or historic archeological site determined to be an "important archeological resource" as defined by Appendix K of the CEQA Guidelines;
- Disrupt or adversely affect a property of historic or cultural significance to a community or ethnic or social group;
- Disrupt or adversely affect a paleontological site; or
- Disrupt or adversely affect a property that may be eligible for inclusion in the California Register of Historic Places

IMPLICATIONS OF THE LAND USE DIAGRAM

Historic Resources

Most new development under the Land Use Diagram will occur in areas that are currently vacant or in agricultural production, with little potential for disturbance of historic structures.

The General Plan would, however, provide for some infill and redevelopment within existing areas. Redevelopment in accordance with the Land Use Diagram could result in the demolition or alteration of historically significant buildings, or disrupt or adversely affect a property that may be eligible for inclusion in the California Register of Historic Places. In addition, new

construction could occur in a manner which detracts from or is disharmonious with surrounding historic buildings and sites.

Archaeological Resources

The records search showed no sites of known cultural or archaeological resources. However, this does not rule out their existence, either at unknown springs or possibly along the Tuolumne River. Given the lack of survey data within the area, it is difficult to assess potential impacts on cultural resources.

Areas that are considered sensitive (i.e., likely to have archaeological or historic cultural resources) are often located near natural water courses, springs, sloughs or at elevated ground. Many archaeological sites in the Central Valley have been buried by silt and might not be evident during surface surveys. Furthermore, the channels of natural watercourses change over the years, and water bodies dry up; therefore, archaeological sites may be found in areas that are distant from present sources of water. To date, only one survey has been performed along the Tuolumne River within Ceres, and this was only a small survey area. The potential for the presence of cultural resources along the Tuolumne River's stretch through Ceres has been largely unexamined.

GENERAL PLAN POLICY RESPONSE

The Policy Document includes several policies and programs address the potential implications of future development on cultural resources:

Historic Preservation

5.B.1. The City shall assist property owners in seeking registration of historic structures and sites as State Historic Landmarks or listing on the National Register of Historic Places.

5.B.2. The City shall encourage the preservation, maintenance, and adaptive reuse of existing historic buildings in the Redevelopment Areas and other areas of the Planning Area in order to prevent demolition and disrepair.

5.B.3. The City shall encourage the preservation of buildings of local historic importance in the Downtown and surrounding areas.

5.B.4. The City shall encourage relocation of reusable historic buildings as a means of historic preservation.

5.B.5. The City shall continue to implement the Historic Building Code for historic properties.

Archaeological Resources

5.C1. The City shall refer development proposals that may adversely affect archaeological sites to the California Archaeological Inventory at California State University, Stanislaus.

5.C2. The City shall not knowingly approve any public or private project that may adversely affect an archaeological site without first consulting the California Archaeological Inventory, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendations of a qualified archaeologist. City implementation of this policy shall be guided by Appendix K of the CEQA Guidelines.

IMPACTS

Historic Resources

Development and redevelopment in the city could result in the demolition or alteration of historically-significant buildings. The General Plan includes an extensive set of policies and programs to preserve historic and architecturally significant sites from development and redevelopment, and to ensure that surrounding development is compatible with the surrounding buildings. The impacts of the General Plan on historic resources, are therefore considered less-than-significant.

Archaeological Resources

No records of archaeological resources have been identified, and agricultural activities and discing have likely disrupted or destroyed any cultural resources that were in the area. Without field examination, this EIR cannot predict where prehistoric resources would be found.

While it is possible that there are archaeological resources in the Planning Area, the General Plan includes policies to protect archaeological resources from new development. The impact of the General Plan is, therefore, considered less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

CHAPTER 7

NATURAL AND AGRICULTURAL RESOURCES

7.1 WATER RESOURCES

ENVIRONMENTAL SETTING

Water resources of the Planning Area comprise surface water and groundwater resources which are integral to the sustainability of the primary agricultural economy in the region. Most of the water applied as crop irrigation is derived from high quality Sierra Nevada runoff via the Turlock Irrigation District (TID) canal system. Flood irrigation is also the principal source of groundwater recharge in the region. The leaching of salts from the root zone and the infusion of chemical constituents from applied pesticides and herbicides result in a degradation of the groundwater recharge to the three aquifers that constitute the regional groundwater system.

The municipal water supplies for the Planning Area have been extracted from the regional groundwater system. However, deteriorating groundwater quality, increasingly stringent drinking water regulations, and declining groundwater levels have combined to strain this historical reliance on groundwater. For the recent 1980-1989 period, well failures related to water quality problems affected 10 percent of the active drinking water wells in the Planning Area. Given the widespread extent of contamination in the upper aquifer zones and the overdraft situation affecting the Planning Area, new well development for municipal drinking supplies is becoming increasingly difficult. Recent attempts at well development suggest it is likely that any new municipal wells will require expensive wellhead treatment systems.

AB3030 was promulgated, under guidance from the State Department of Water Resources in 1992, to allow water providers to enact groundwater management plans. The City of Ceres is involved in separate ongoing cooperative discussions with other municipalities and water/irrigation districts to formulate a groundwater management plan for the region. Part of these discussions have focused on the potential for importing surface water from the TID system for the area's drinking water supply. If implemented this plan for conjunctive use of surface water and groundwater would provide a more reliable, high quality drinking water supply to area residents and reduce the regional overdraft of the groundwater basin. For the present and near future, however, groundwater will continue to act as the principal source for Planning Area municipal supplies.

Stormwater runoff is removed from the urban portions of the Planning Area by a series of detention basins and pumping stations and retention basins. Pumped stormwater discharges into TID canals and, aside from some natural clarification that occurs during its detention, is untreated. Approximately 15 percent of the planned Urban Growth Area stormwater is infiltrated, recharging the groundwater basin.

Flooding occurs occasionally in the city if local storage and/or pipe capacity is exceeded. Limited areas immediately adjacent to the Tuolumne River and below the bluffs in the northern portion of the Planning Area can also experience flooding during severe flood events.

With water becoming a more precious commodity, it must be used wisely. Currently, a part of the water that Ceres pumps from the ground has already been used by farmers for irrigation purposes. After use within the city, 25 percent of that water is returned to the groundwater table. With the expansion of Ceres' wastewater treatment facility, high quality water will be produced that can be used directly on any crops or added to stream flow. By using such water resources either directly or by mixing it with water flowing in canals, 100 percent of the water is being reused, rather than the smaller percentage when it is percolated into the ground. If disposed of in a river, little or no water is recharged to the regional groundwater basin. The State of California, in its updated California Water Plan, assumes that 800,000 acre-feet of reclaimed water will be used in the year 2010 to meet statewide water demand.

METHODOLOGY

This section describes the assumptions, methodology and thresholds of significance used to assess impacts to water resources that would be expected to occur based on the Land Use Diagram. Land use categories assessed include Planned Urban Phases 1 and 2. Impacts were assessed quantitatively, wherever possible, based on information contained in the General Plan Background Report and Land Use Diagram (Figure 1-2) contained in the Policy Document.

Impacts were assessed for the conversion of farmland to residential, commercial, industrial, parks, commercial recreation or community facilities within the geographic area delimited by the Urban Growth Boundary. The significance of the impacts described for the current planning horizon (2015) will potentially increase after 2015, due to the projected conversion of additional farmland to residential and industrial uses. This future development is categorized in the Land Use Diagram as Residential Reserve (RR) and Industrial Reserve (IR).

Assumptions

1. The hydrologic characteristics of converted agricultural lands were assumed uniform and, therefore, did not reflect the effect of inholdings of farmlands, orchard or pasture on the hydrologic response of areas designated as residential, commercial, industrial, or public facilities in the Land Use Diagram.
2. Existing farmlands proposed for residential and industrial reserve will continue to respond hydrologically as agricultural land for the duration of the planning period (through 2015).
3. Levels of chemical input to agricultural lands were assumed static, therefore, the rate of contaminant migration into the regional groundwater basin was assumed to continue as in the recent past. This also means that some particularly critical contaminants such as DBCP were assumed to continue to affect groundwater quality, even though their use was discontinued in 1977. The assumption is valid due to extremely low groundwater velocities (on the order of ft./yr.) and to the extent of upgradient contamination.

4. The principal source for the area's municipal drinking water supplies will continue to be pumped groundwater. While discussions are underway to eventually develop a new regional surface water supply from the TID, no agreement is imminent and, therefore, was not considered a certainty for the purposes of this EIR.

Thresholds of Significance

The CEQA has defined "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project". Accordingly, for this EIR, the affect of implementation of the policies and land use changes cited in the Policy Document on water resources will be considered significant when it:

3. Substantially conflicts with adopted environmental plans and goals of the community, substantially degrades water quality, contaminates a public water supply, substantially degrades or depletes groundwater resources, causes substantial flooding, erosion or sedimentation, or substantially degrades habitat for fish, wildlife or plants.

For the purposes of this EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of the effects described above.

IMPLICATIONS OF THE LAND USE DIAGRAM

A comparative review of the existing land use cited in the Background Report and the proposed land uses presented in the Policy Document indicates that residential, commercial, industrial/office park, and community facilities will all gain in areal coverage at the expense of agricultural lands. The net loss of 3,700 acres of farmland will total roughly 45 percent of the Urban Growth Area.

Municipal Water Supply

Proposed land use changes would significantly increase the demand for potable water by new residential, commercial and industrial users in the Planning Area. Such increases in demand will further tax the already heavily stressed municipal supply system. New water wells would likely require expensive wellhead treatment and groundwater recharge volumes would decrease, resulting in a worsening of the overdraft situation in the regional groundwater basin.

Partially compensating effects would include a reduction in the influx of agriculturally based groundwater contaminants associated with pesticide and herbicide application on flood-irrigated lands. The extent to which this benefit to groundwater quality would itself be offset by increased seepage from on-site stormwater detention ponds, maintained by commercial or industrial water users, or the regional wastewater treatment plants is uncertain.

Surface Water

The residential uses and the commercial, industrial and community facilities uses mapped in the Land Use Diagram would all be accompanied by varying densities of impervious surface and storm drain system construction. This new construction would increase both the volume and rates of stormwater runoff emanating from urbanizing portions of the Planning Area.

Downstream storm drain, pumping stations and/or natural drainage systems could be stressed if they are of insufficient capacity, causing nuisance surface flooding at street intersections and other storm drain/channel junctures.

During the construction and post-construction (3-5 years) phases of urban development, erosion and the flushing of sediments into drainage systems and into the TID canal systems could increase the turbidity of stormwater runoff downstream of the developed areas, as well as reduce channel, detention basin and culvert capacities where sedimentation is significant. Since some erosion and off-site sediment transport certainly occurs under present agricultural uses, any net increase in downstream sedimentation would likely be related to the efficiency of newly constructed urban drainage systems.

The quality of stormwater runoff would be adversely affected by the proposed development, due to the introduction of typical urban pollutants such as automotive contaminants (oil and grease, heavy metals), pesticides and herbicides, suspended solids, nutrients, coliform bacteria and floatables. Some of these contaminants, in particular, heavy metals and pesticide/herbicide residues can be adsorbed onto sediment particles or can accumulate in the tissues of aquatic organisms.

Depending on the actual composition of commercial development within the Planning Area, other toxic contaminants could enter new storm drain systems as the result of poor on-site storage of chemicals or the discharge of wash waters from cleansing and de-greasing activities. The Land Use Diagram suggests there is no unusual concentrations of proposed commercial and industrial development. Therefore, the principal nodes of concentration of stormwater contaminants would occur in the detention areas that store runoff prior to its pumped discharge into TID laterals. Industrial development is required to retain stormwater onsite, so it would not enter the City's storm drainage system.

Groundwater

The proposed changes in land use, as noted above in the section on "Municipal Water Supplies," would increase the demand for potable water for residential, commercial and industrial uses. The resulting increased groundwater withdrawal would aggravate the existing overdraft condition in the regional groundwater basin. Development of a significant pumping depression could also increase local hydraulic gradients and thus, the rate of contaminant migration from upgradient source areas. The extent of this potential for an alteration in the area groundwater flow characteristics would depend on many uncertain factors and is unpredictable without more detailed information on the exact nature of the increased water demand and the pattern of well development.

While existing groundwater contamination from upgradient sources could worsen with accelerated exploitation of the groundwater resource in the Planning Area, the conversion of

farmland would also reduce the input of pesticides and herbicides to the developed areas. The improvement in groundwater quality due to this reduction in irrigated farmland would be partially offset in developed residential areas by fertilizer and pesticide/herbicide application that typically attend lawn irrigation.

The conversion of farmland to commercial and industrial uses could increase the occurrence of shallow groundwater contamination via leaking or buried chemical storage containers, underground gasoline tanks, seepage from stormwater detention ponds and other temporary or semi-permanent methods of waste storage and disposal. The Central Regional Water Quality Control Board regulates and monitors industrial waste storage, treatment and transfer operations in the Planning Area through the provisions of the state and federal water quality laws, including the Porter-Cologne Act, the Federal Clean Water Act, and the National Pollutant Discharge Elimination System (NPDES) permit process.

GENERAL PLAN POLICY RESPONSE

The following policies and programs address impacts on water resources associated with development under the Land Use Diagram.

6.B.1. The City shall cooperate with other agencies in the conservation of the Tuolumne River for the protection of its water resources and its open space qualities.

6.B.2. The City shall cooperate with other jurisdictions to jointly study the potential for using surface water sources to balance the ground-water supply to protect against aquifer overdrafts and water quality degradation.

6.B.3. The City shall help protect groundwater resources from overdraft by promoting water conservation and groundwater recharge efforts.

6.B.4. The City shall continue to require the use of feasible and practical best management practices (BMPs) to protect receiving waters from the adverse effects of construction activities and urban runoff.

6.B.5. The City shall encourage the protection of floodplain lands.

Water Supply

4.C.11. The City shall continue to investigate the possibility of securing and using surface water supplies for domestic use within the Ceres area.

4.C.2. The City shall only approve new development that relies on a public water system and where an adequate water supply and conveyance system exists or will be provided.

4.C.3. The City shall promote efficient water use and reduced water demand by:

- a. Requiring water-conserving design and equipment in new construction;

- b. Encouraging water-conserving landscaping and other conservation measures; and
- c. Encouraging retrofitting existing development with water-conserving devices.
- d. Providing public education programs
- e. Distributing outdoor lawn watering guidelines
- f. Promoting water audit and leak detection programs
- g. Enforcing water conservation programs

4.C.4. The City shall investigate the use of reclaimed wastewater to offset the demand for new water supplies. Such programs may include : dual water systems for potable and nonpotable water; reuse of grey water in homes or businesses for irrigation; and reuse of sewage effluent for irrigation of crops, golf courses, or city irrigation.

4.C.5. The City shall promote aquifer and wellhead protection programs to limit infiltration of pollutants that might contaminate the groundwater supply.

4.C.6. The City shall participate in a groundwater management program to preserve existing groundwater quality and quantity and to ensure future supplies.

IMPACTS

Development under the General Plan would result in a significant, unavoidable adverse impact on the regional groundwater resource by exacerbating the existing condition of groundwater overdraft. Other impacts on groundwater quality and surface water resources would be mitigated to a less-than-significant level by implementation of the policies and programs described in the General Plan Policy Document.

MITIGATION MEASURES

No additional mitigation measures beyond the policies and programs of the General Plan are available.

7.2 AGRICULTURAL RESOURCES

ENVIRONMENTAL SETTING

Agriculture has played an important role in the history and development of Ceres and Stanislaus County, and it continues to contribute substantially to the local economy. The gross agricultural income for Stanislaus County has recently been estimated at over one billion dollars (Stanislaus County 1992). The majority of these agricultural lands under production within the Planning Area are considered of the best possible quality (designated as Prime Farmland) in terms of physical and chemical characteristics for the production of crops. Chapter 8 of the General Plan Background Report provides a detailed description of soil characteristics and existing agricultural resources occurring within the Planning Area.

METHODOLOGY

This section describes the assumptions, methodology and thresholds of significance used to assess impacts to agricultural resources that would be expected to occur by the year 2015 as presented in the Land Use Diagram. Impacts were assessed quantitatively based upon information contained in the General Plan Background Report and the Land Use Diagram (Figure 1-2) contained in the Policy Document. Impacts were assessed for the proposed direct conversion of existing farmland (currently designated as Prime Farmland or Land of Statewide Importance) to residential, commercial, industrial, parks, commercial recreation or community facilities within the geographic area delimited by the Urban Growth Boundary. In addition, we present a brief analysis of agricultural land designated as Prime Farmland or Land of Statewide Importance that would be directly converted to non-agricultural uses at full buildout (i.e. some time beyond the year 2015) of the Land Use Diagram. Such areas are designated as Residential Reserve (RR) and Industrial Reserve (IR).

Assumptions

1. No conversion of farmland was considered within areas currently identified in the General Plan Background Report as urban (industrial/residential/parks/schools) despite the fact that several relatively small parcels within this predominantly urban area currently support agricultural resources (cropland/ orchard/vineyard/pasture).
2. Land within the Planning Area, located outside of the urban growth boundary, designated as Residential Reserve (RR), Industrial Reserve (IR), or Agricultural (A) was assumed to remain useable for future agricultural operations as Prime Farmland or Land of Statewide Importance for the purposes of this analysis which extends to the year 2015.
3. The amount of agricultural land that would be converted within the Urban Growth Area by the year 2015 is based on direct conversion to urban uses and indirect conversion as a result of creating small, nonviable farming units from adjacent urban development, development of infrastructure and designation as a non-agricultural land as presented on the Land Use Diagram.

Thresholds of Significance

The CEQA Guidelines provide guidance in evaluating project impacts and determining which will be significant. CEQA has defined “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” According to Appendix G of the CEQA Guidelines, a project’s effects on agricultural resources will be considered significant when the project will, “convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.” For the purposes of the EIR, impacts to agricultural resources are considered significant if adoption or implementation of the plan would:

2. Convert agricultural lands designated by the California Department of Conservation (CDC) as Prime Farmland or Land of Statewide Importance to non-agricultural uses by the year 2015;

3. Substantially reduce the total amount of agricultural land in Stanislaus County, thereby extending the analysis to the lost agricultural lands not given either of the two designations by the CDC.

IMPLICATIONS OF THE GENERAL PLAN USE DIAGRAM

Table 7-1 shows the estimated acreage of agricultural land that would be converted by the year 2015 through development under the Land Use Diagram. The table also indicates the total land designated for non-agricultural uses designated as either Prime Farmland or Land of Statewide Importance that would be converted at full buildout of the Land Use Diagram. For purposes of this analysis, existing agricultural lands have been divided into three areas as defined by: 1) areas located east of Highway 99; 2) land west of Highway 99 and south of Service Road; and 3) property west of Highway 99 and north of Service Road.

TABLE 7-1

ESTIMATED ACREAGES OF AGRICULTURAL LAND CONVERTED TO URBAN USE Within Urban Growth Area and Reserve Areas

Geographic Analysis Area	Acres Converted within UGA			Acres Converted in Reserve Area		
	Prime/	Statewide	Unique & Local	Prime & Statewide	Unique & Local	
East of 99	1,750	-	-	-	-	-
West of 99/South of Service Road	600	-	-	1,496	-	-
West of 99/North of Service Road	750	10	-	225	88	-
Total	3,100	10	1,721	88	-	-

East of Highway 99

The area east of Highway 99 is entirely Prime Agricultural Land. The Land Use Diagram designates this area primarily for residential and light industrial uses. Development under the General Plan would, therefore, result in the loss of approximately 1,750 acres of prime agricultural land by the year 2015. No additional losses are planned in this area at buildout.

West of Highway 99/South of Service Road

Prime Agricultural Land and Land of Statewide Importance comprises the area west of Highway 99 and south of Service Road. By the year 2015 this area is designated for residential, light and general industrial, commercial recreation, business park and community facilities. Development under the General Plan would convert approximately 600 acres of existing agricultural lands by 2015. An additional 1,496 acres will be lost at buildout of the Reserve areas.

West of Highway 99/North of Service Road

The area west of Highway 99 and north of Service Road is primarily comprised of Prime Agricultural Land. The Land Use Diagram designates this area primarily for residential (low, medium and high density), industrial (light and general), commercial (community and office)

and community facilities. Development under the General Plan would, therefore, result in the loss of approximately 750 acres of prime agricultural land along with 10 acres of Farmland of Local Importance by the year 2015; at buildout of Reserve areas an additional 225 acres and 88 acres, respectively, would be lost from these two farmland categories.

GENERAL PLAN POLICY RESPONSE

The following policies protect agricultural resources from development-related impacts presented under the Land Use Diagram.

6.A.1. The City shall discourage leapfrog development and development in peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations.

6.A.2. The City shall encourage continued agricultural production on properties within the Urban Growth Area until they are needed for urban development. The City shall continue to participate in the City-County agreement for County referral of development proposals in unincorporated areas of the city.

6.A.3. The City shall ensure that new development and public works projects do not encourage expansion of urban uses outside the Planning Area into areas designated for Agriculture on the Land Use Diagram.

6.A.4. The City shall require development adjacent to designated agricultural areas to minimize conflicts with adjacent agricultural uses.

6.A.5. The City shall continue to support the County's right-to-farm ordinance.

6.A.6. The City shall encourage and support Stanislaus County in the implementation of its agricultural preserve program.

IMPACTS

Development of agricultural lands to urban land uses as allowed by the General Plan would allow for conversion of approximately 3,100 acres of agricultural land designated as Prime Farmland and Farmland of Statewide Importance. Development under of the General Plan would, therefore, result in substantial reduction in the annual production of agricultural commodities and related employment base within the Planning Area. Conversion of these farmlands constitutes a significant adverse impact.

MITIGATION MEASURES

The only way to mitigate the conversion of prime agricultural lands would be to designate the lands for agricultural uses. The loss of prime agricultural lands is, therefore, a significant adverse impact that cannot be mitigated to a less than significant level.

7.3 BIOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Biological resources of the Planning Area include biotic habitats, whether native (e.g. riparian corridor of the Tuolumne River), or non-native (e.g., urban or agricultural), and the complete flora and fauna within this area. It also includes special-status plants and animals and other sensitive biotic resources. Five different biotic habitats were observed within the Planning Area. These habitats included agricultural, ruderal, urban, riparian forest and freshwater emergent.

In general, the native flora of the area has been replaced by a mixture of agricultural row crops, trees and vineyards, horticultural species primarily used in landscaping, and non-native annual grasses and forbs which have invaded fallow fields, roadways and fencelines. The riparian forests along the banks of the Tuolumne River and freshwater emergent plants in the bed and channel of the river represent the only continuous expanse of native vegetation. Expanded habitat descriptions and their distribution within the Planning Area are shown in Chapter 7 of the General Plan Background Report. This report also lists special-status plant and wildlife species, sensitive biotic habitats and jurisdictional waters which could potentially occur in Ceres Planning Area.

METHODOLOGY

This section describes the assumptions, methodology and thresholds of significance used to assess impacts to biological resources that would be expected to occur by the year 2015 as presented in the Land Use Diagram. These area designations include Planned Urban: Phase 1 and 2. Impacts were assessed quantitatively based upon information contained in the General Plan Background Report and the Land Use Diagram (Figure 1-2) contained in the Policy Document. Impacts were determined for the proposed direct conversion of existing native and non-native biotic habitats to residential, commercial, industrial, parks, commercial recreation or community facilities within the geographic area delimited by the Urban Growth Boundary. In addition, we present a brief analysis of biotic habitats that would be directly converted to urban uses at full buildout (i.e. some time beyond the year 2015) of the Land Use Diagram. Such areas are designated as Residential Reserve (RR) and Industrial Reserve (IR).

Assumptions

1. Impacts to wildlife species are assumed to be directly correlated with the loss of terrestrial and aquatic communities that provide their primary habitat. The direct loss of the native habitats to urban uses, therefore, will result in the loss of associated wildlife species.
2. Impacts to wildlife due to loss, alteration or disturbance of existing habitats associated with implementation of the Land Use Diagram will primarily involve the conversion of agricultural land to urban or industrial.
3. The conversion of agricultural lands to occur within the urban growth boundary is assumed to result in the elimination and/or fragmentation of non-native vegetation and the wildlife occurring in them. These losses would result from site grading, road building,

infrastructure installation, and direct wildlife loss or disturbance by construction activities and human habitation.

4. As currently proposed in the Land Use Diagram, it is assumed that no direct impacts are to occur to vegetation occurring within the riparian, aquatic and freshwater emergent habitats associated with the Tuolumne River within the Planning Area. In addition, it is assumed that direct impacts and disturbances by construction activities and human habitation will not occur within a designated buffer area of the riparian corridor.

Thresholds of Significance

The CEQA Guidelines provide guidance in evaluating project impacts and determining which will be significant. CEQA has defined “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” According to Appendix G of the CEQA Guidelines, a project’s effects on biological resources will be considered significant when the project will:

- (a) substantially affect a rare, threatened or endangered species of animal or plant or habitat of the species;
- (b) interfere substantially with the movement of any resident or migratory fish and wildlife species, and;
- (c) substantially diminish habitat for wildlife or plants.

For the purposes of this EIR, a significant impact is assumed if adoption or implementation of development as presented in the Land Use Diagram would result in any of these effects described above.

IMPLICATIONS OF THE LAND USE DIAGRAM

Habitat Losses within the Urban Growth Area

Agricultural (Cropland/Orchard/Vineyard/Pasture). Agricultural habitats within the Planning Area (dominated by orchards) are generally of low value to native terrestrial vertebrates, although some croplands may be seasonally important as foraging habitat. Similar agricultural habitats will remain to be regionally abundant in Stanislaus County. While there will be some overall losses to wildlife, these losses are not significant, given the reduced values presently, and the regional abundance of the resources.

Ruderal (Disturbed). Like agricultural habitats, ruderal habitats are generally of low value to native terrestrial vertebrates, and are expected to remain to be regionally abundant in Stanislaus County. Therefore, the biotic values associated with these habitats are not expected to be diminished.

Urban (Industrial/Residential/Parks/Schools). The amount of urban habitat is expected to increase with the implementation of the General Plan.

Riparian Forest. The riparian forest associated with the Tuolumne River is the most structurally and floristically diverse habitat in the planning area and has considerable ecological value. While no impacts are planned within this habitat, impacts immediately adjacent to this habitat may diminish its value. Disturbance from humans and their pets as well as an increase in noise and litter originating from nearby development could significantly reduce the value this habitat provides to wildlife.

Freshwater Emergent. While no impacts are planned within this habitat, impacts immediately adjacent to this habitat may diminish its value. Disturbance from humans and their pets, an increase in noise and litter, and degradation of water quality originating from nearby development could significantly reduce the value this habitat provides to wildlife.

Sensitive Biotic Resources

Special-Status Plants and Animals

1. Special-Status Species of the Tuolumne River Riparian and Aquatic Habitats. The valley elderberry longhorn beetle, Sacramento splittail, southwestern pond turtle, river lamprey, chinook salmon, steelhead-rainbow trout, hitch, hardhead, Sacramento squawfish and Sacramento sucker, Double-crested Cormorant, Yellow Warbler and Yellow-breasted Chat are all associated with either the Tuolumne River riparian or aquatic habitats.
2. Special-Status Birds of Prey. The Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk and Black-shouldered Kite may forage within the planning area during winter and periods of migration, especially in the agricultural habitats. However, the conversion of agricultural and ruderal habitats will not result in a substantial reduction of these species regionally.

Sensitive Biotic Habitats

3. Riparian Forest. Sensitive biotic habitats, like the riparian forest within the Planning Area, are those which were once common but are now of limited extent. In the past these areas have been impacted by conversion of lands directly adjacent to and within the riparian corridor to agriculture and urban land uses without regard for riparian buffer zones to protect these sensitive resources. Riparian habitats are generally rich in botanical and wildlife resources and may support large numbers of special-status plants and animals. Continued development of this habitat will significantly affect the wildlife species using these areas, and in some cases, may lead to their extirpation within Stanislaus County.

GENERAL PLAN POLICY RESPONSE

The following policies protect fish and wildlife habitat, including wetland communities, riparian areas, and appropriate buffer areas from development-related impacts presented under the Land Use Diagram. Within the Ceres' Planning Area, these resources are primarily restricted to the riparian and wetland habitats associated with the Tuolumne River.

Fish and Wildlife Habitat

6.C. i. The City shall support preservation of habitats of rare, threatened, endangered, and/or other special status species. The City shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

6.C. ii. The City shall encourage the control of residual pesticides to prevent potential damage to water quality, vegetation, and wildlife.

6.C. iii. Prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the City shall require, as part of the environmental review process, a biotic resources evaluation of the site by a wildlife biologist. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the City shall determine the feasibility of the identified mitigation measures.

Significant ecological resource areas shall, at a minimum, include the following:

- a. Any habitat for rare, threatened or endangered animals or plants.
- b. Riparian and wetland habitats associated with the Tuolumne River

6.C. iv. The City shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland habitats, wildlife migration corridors, and locally-important species/communities.

6.C. v. The City shall support the management efforts of the California Department of Fish and Game to maintain and enhance the productivity of fisheries in the Tuolumne River.

The following policies provide for the protection and preservation of valuable vegetation resources from development-related impacts presented under the Land Use Diagram. Within the Ceres' Planning Area, these resources are primarily restricted to the riparian and wetland habitats associated with the Tuolumne River.

Vegetation

6.D. i. The City shall encourage landowners and developers to preserve natural vegetation along the Tuolumne River and to use native and compatible non-native species in landscaping in these areas.

- 6.D. ii. The City shall support the preservation of outstanding areas of natural riparian vegetation.
- 6.D. iii. The City shall establish procedures for identifying and preserving rare, threatened, and endangered plant species and their habitats that may be adversely affected by public or private development projects. A biotic resources evaluation, as outlined under Policy 6.C.4, shall be conducted by a qualified plant biologist for these species and shall include a review of lists maintained by various resource agencies which identify known occurrences of rare, threatened, and endangered plants in the Ceres area.
- 6.D. iv. If possible, the City shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats.
- 6.D. v. The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

IMPACTS

Implementation of development of agricultural (cropland/orchard/vineyard/pasture) and ruderal (disturbed) habitats as described in the General Plan would allow for conversion of these lands to primarily urban (industrial/residential/parks/schools) uses. Development under the General Plan would, therefore, effectively replace one human-altered habitat with another. These agricultural habitats are generally of low value to wildlife, in addition, such habitats will remain regionally abundant even at buildout. Conversion of these farmlands and ruderal habitats to urban uses, therefore, constitutes a less-than-significant impact.

Under the current Land Use Diagram, no direct impacts are proposed for the riparian corridor of the Tuolumne River. Impacts occurring immediately adjacent to this habitat from development under the General Plan may, however, substantially diminish its value for fish and wildlife. Such disturbance would be mitigated to a less-than-significant level by the policies and programs of the Policy Document.

MITIGATION MEASURES

No additional mitigation measures beyond the policies and programs of the General Plan are necessary.

7.4 AIR QUALITY

ENVIRONMENTAL SETTING

Ceres is within the northern portions of the eight-county San Joaquin Valley Air Basin. This air basin is a well-defined climatic region, primarily because of the topographic barriers which form distinct boundaries on three sides of the basin. The western boundary is formed by the Coast Range, the southern boundary by the Tehachapi Mountains, and the eastern boundary by the Sierra Nevada. Only the northern boundary is not marked by a distinct topographic feature. At the northern end of the basin the Carquinez Strait, a sea level gap between the Coast Ranges, extends to the west and is a major source of ventilation.

Ceres lies within the low, flat San Joaquin Valley. This area is characterized by hot summers and mild winters. The San Joaquin Valley floor is quite arid due to a rain "shadow" created by the series of coast mountain ranges separating the valley from the Pacific Ocean.

Within the northern San Joaquin Valley northwesterly winds dominate during the spring and summer months, and show a strong daily variation. Highest average windspeeds occur in the afternoon and evening hours; lightest winds occur in the night and morning hours. During fall and winter northwesterly winds still predominate, but wind direction is more variable, and calm conditions are more frequent.

The climate and geography of the San Joaquin Valley is very conducive to the air quality degradation. The summertime wind pattern carries pollutants from adjacent air basins into the Valley and to the south. Locally-generated pollutants are also carried to the south where ventilation is restricted by mountains. The hot temperatures and frequent sunshine typical of the summer months promote the formation of photochemical pollutants such as ozone.

The fall and winter months are characterized by frequent periods of stagnation. These conditions result in elevated concentrations of locally-generated pollutants such as suspended particulates and carbon monoxide.

Federal and state standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM-10) and lead. California has also set standards for pollutants not covered by national standards (sulfates, hydrogen sulfide, vinyl chloride, visibility reducing particles). The state and federal primary standards for major pollutants are shown in Table 7-2.

TABLE 7-2

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	California Standard
Ozone	1-hour 0.12 PPM	0.09 PPM	
Carbon Monoxide	8-hour		
	1-hour 9.0 PPM		
	35.0 PPM	9.0 PPM	
	20.0 PPM		
Nitrogen Dioxide	Annual		
	1-hour 0.05 PPM		
---	---		

0.25 PPM
 Sulfur Dioxide Annual
 24-hour
 1-hour 0.03 PPM
 0.04 PPM
 0.25 PPM ---
 0.04 PPM
 0.25 PPM
 Suspended Particulates Annual
 24-hour 50 ug/m³
 150 ug/m³ 30 ug/m³
 50 ug/m³
 Lead 30-day avg.
 3-month avg. ---
 1.5 ug/m³ 1.5 ug/m³

 PPM = parts per million
 ug/m³ = micrograms per cubic meter

The San Joaquin Valley Unified Air Pollution Control District and California Air Resources Board operate a network of air quality monitoring sites within the San Joaquin Valley Air Basin. While none are located in Ceres, two monitoring sites are located in nearby Modesto. The Modesto 14th Street monitoring site (814 14th Street) measures three gaseous pollutants: ozone, carbon monoxide and nitrogen dioxide. The Modesto Courthouse site (1100 I Street) measures suspended particulates (PM-10).

A summary of air quality data for the Modesto monitoring sites is included in the Background Report. The data shown includes annual maximum concentrations, the number of days that the state or federal air quality standards were exceeded, and annual statistics for PM-10.

Standards for ozone and PM-10 are currently exceeded in Ceres. Both pollutants are regional problems affecting the entire San Joaquin Valley Air Basin. Modesto has also experienced violations of the eight-hour state and federal standards for carbon monoxide. In general, air quality has been gradually improving in Modesto and the greater San Joaquin Valley Air Basin, but air quality still does not meet all state and federal standards.

METHODOLOGY

Assumptions

1. New housing, population and employment growth will occur consistent with the development estimates in Chapter 2 of this EIR.
2. Roadway improvements and future traffic and congestion levels will occur consistently with projections contained in Chapter 4 of this EIR.

3. The gasoline-powered automobile will remain the primary mode of transportation in the future.

Local Air Quality Effects

Carbon monoxide is a poisonous gas emitted primarily by automobiles. High concentrations of this pollutant are normally only found near congested roadways. To estimate future concentrations of this pollutant a screening form of the CALINE-4 computer simulation model was applied to ten selected surface intersections within the city. These intersections were selected as having the higher total approach volumes of all intersections, and the analysis was performed assuming worst-case meteorological conditions. The CALINE-4 program and the assumptions made in its use are described in Appendix A.

Regional Impacts

Development following the General Plan would result in additional emissions from vehicles and stationary sources affecting the regional air basin. New emissions associated with development under the General Plan have been estimated using the URBEMIS-5 computer program developed by the California Air Resources Board. New vehicle emissions resulting from the projected incremental population increase was estimated for the year 2015. A description of the methodology and assumptions used in the analysis of regional vehicular emissions are included in Appendix A.

Residential uses contain many dispersed and intermittent sources of pollutants such as space and water heaters, household paints and solvents, fireplaces and woodstoves, lawn mowers and other equipment. These emissions have been estimated based on the number of new residential units. The calculation of these emissions is described in Appendix A.

Thresholds of Significance

The significance of project impacts on carbon monoxide has been determined by comparing projected concentrations to the applicable state and federal standards. For the purposes of this EIR, impacts are considered significant if they caused a violation of the air quality standards, or would contribute substantially to an existing or projected air quality violation.

The significance of regional emissions increases is determined by comparison of project-related emissions to "thresholds of significance" suggested by the San Joaquin Valley Unified Air Pollution Control District. Although these thresholds have not been formally adopted, it is anticipated that they eventually will be as a portion of SJVUAPCD guidance for environmental analyses.

The significance thresholds are 55 pounds per day for Reactive Organic Gases (ROG) and Nitrogen Oxides (NOx), the two precursors of ozone.

A second regional criterion for significance was applied to the project. Since the regional air quality plans are based on projections of population within the District, a general plan that assumes population or employment projections substantially exceeding those assumed within the regional nonattainment plan is deemed to have a significant impact on regional air quality.

IMPLICATIONS OF THE LAND USE DIAGRAM

The adoption of the General Plan would not have a direct air quality effect. Indirectly, the General Plan would accommodate new growth in population and employment, affecting local and regional air quality.

Local Scale

Development according to the General Plan would alter traffic volumes and change concentrations of localized pollutants such as carbon monoxide near streets and highways. Concentrations of this pollutant are related to the levels of traffic and congestion along streets and at intersections.

The results of the CALINE-4 modeling are shown in Table 7-3. The 1-hour concentrations in Table 7-3 are to be compared to the state 1-hour ambient air quality standards 20 PPM and the federal standard of 35 PPM. The 8-hour concentrations are to be compared to the state and federal standard of 9 PPM.

No violations of either standard are indicated with General Plan buildout in the year 2015. This result is consistent with the carbon monoxide attainment plan for the region that forecasted reductions in CO concentrations sufficient to meet the ambient air quality standards by 1995. Buildout under the General Plan would not have a significant impact on local carbon monoxide concentrations.

TABLE 7-3

YEAR 2015 WORST-CASE CARBON MONOXIDE CONCENTRATIONS 25 FEET FROM MAJOR INTERSECTIONS

In Parts per Million

Intersection	1-Hour Concentration		8-Hour Concentration
Hatch Road/ Richland Avenue	8.2		6.4
Hatch Road/Mitchell Road	10.9	8.0	
Hatch Road/Washington Road	10.5		7.7
Whitmore Avenue/Mitchell Road	7.9		5.9
Whitmore Avenue/Moffet Road	6.2		4.7
Whitmore Avenue/Blaker Road	5.8		4.4
Whitmore Avenue/Washington Road	8.9		6.6
Service Road/Mitchell Road NB	7.3		5.4
Service Road/Mitchell Road SB	7.8		5.8
Service Road/Central Avenue	7.1	5.3	
Most Stringent Standard	20.0	9.0	

Source: Donald Ballanti, Certified Consulting Meteorologist, 1996

Regional Scale

The incremental increase in daily emissions from projected population growth up to 2015 under the General Plan is shown in Table 7-4 for Reactive Organic Gases and Nitrogen oxides. Estimated area-source emissions are also shown.

TABLE 7-4

POPULATION-RELATED YEAR 2015 REGIONAL EMISSION IMPACTS, IN POUNDS PER DAY

Source	ROG	NOx	
Vehicle Traffic		791	992
Area Sources	1,976	393	
Total	2,767	1,385	

ROG = Reactive Organic Gases

NOx = Nitrogen Oxides

Source: Donald Ballanti, Certified Consulting Meteorologist, 1996

In addition to the emissions shown in Table 7-4, development under the General Plan would result in new industrial development within Ceres. The type or amount of such emissions is not predictable, since industrial emissions can vary greatly depending on the processes and materials involved. Any future industrial sources would be subject to the rules and regulations of the San Joaquin Valley Unified Air Pollution Control District, which currently requires major new stationary sources to use BACT (Best Available Control Technology) and provide off-sets.

The incremental increase in regional emissions shown in Table 7-4 would exceed the thresholds of significance recommended by the SJVUAPCD. However, this would be true for any general plan in an area with a growing population.

A more important significance threshold would be exceeded if the General Plan were based on population projections that substantially exceeded that assumed in regional air plans. This is because the regional air plan has assumed and accounts for an incremental amount of growth within the City of Ceres, and if actual population exceeds this assumed increment additional control measures will be required to attain the ambient air quality standards.

State and federal air quality plans are based on SAAG population and employment forecasts. The General Plan projections for population and employment are based on a "credible, worst-case scenario" for buildout of the Urban Growth Area. Projections of population and employment are based on assumed development of all vacant and underutilized land. The resulting potential population growth from 1994 to 2015 is about 54,000, about 20 percent higher than SAAG projections for the same period. Since the General Plan is based on buildout

projections by an arbitrary horizon year rather than a specific growth rate projection, this inconsistency between the General Plan and regional air quality plan is not considered meaningful or significant.

GENERAL PLAN POLICY RESPONSE

The General Plan Policy Document includes a comprehensive set of policies and objectives, if implemented, would partially mitigate the air quality implications of future growth within Ceres. A compilation of air quality-related policies is included as Appendix B of the Policy Document.

Citywide Growth and Development

1.B.7. The City shall promote infill development and reuse of underutilized parcels in the city, consistent with maintaining or enhancing the positive qualities of the surrounding neighborhoods.

1.B.9. The City shall promote pedestrian, bicycle, and transit access and circulation in designating and approving new development.

1.B.10. The City shall monitor technological advances that may affect planning (e.g., advances in the use of electric cars, changes in communications systems) to take the lead in planning for changes that may affect land use.

Residential Development—General

1.C.5 The City shall encourage multi-family housing to be located throughout the community, especially near transportation corridors, downtown, major commercial areas and neighborhood commercial centers.

New Residential Neighborhoods

1.D.1. The City shall encourage the creation of well-defined residential neighborhoods throughout the city, including in newly-developing areas. Each neighborhood should have a clear focal point, such as a park, school, or other open space and community facility, and shall be designed to promote pedestrian convenience. To this end, the City shall consider the form of historic neighborhoods, including emphasis on pedestrian access and circulation, and tree-lined parkways, as models for the planning and design of new residential neighborhoods.

1.D.2. Consistent with the City's annexation policy, new residential development shall occur after adoption of areawide plans (i.e., master plans or specific plans). Areawide plans shall indicate the locations of various residential land uses, parks, schools, neighborhood commercial, streets, bikeways, walkways, and other infrastructure. Areawide plans shall include a mix of residential densities.

Each residential areawide plan shall at a minimum address the following: . . .

e. Provisions for the extension of the existing city roadway system into new development areas. New development shall be linked to adjacent existing neighborhoods and planned neighborhoods. . . .

h. Provisions for linking residential neighborhoods, parks, schools, shopping areas, and employment centers through a system of pedestrian and bicycle pathways. . .

1.D.3. The City shall require residential subdivisions to be designed to provide well-connected internal and external street, bicycle, and pedestrian systems.

1.D.4. The City shall promote architectural and landscape design features in new development that create more pedestrian-friendly neighborhoods, such as rear, setback, or detached garages, front porches, tree-lined streets, and landscaped strips between street and sidewalks.

1.9. The City shall, if necessary, consider the preparation of residential design guidelines to promote features that make development more pedestrian and bicycle friendly.

Commercial Land Use

1.F.2. Commercial facilities should be designed to promote transit, pedestrian, and bicycle access. The City shall require that new commercial development be designed to encourage and facilitate pedestrian circulation within and between commercial sites and nearby residential areas rather than being designed solely to serve vehicular circulation.

Mitchell/Service Road Regional Commercial Area

1.K.2. The City shall require the preparation of a master plan or amendment to the Mitchell Road Corridor Specific Plan to guide the development of the Mitchell/Service Road area, as shown in Figure 1-5, consistent with the general guidelines included in Appendix A. Specifically, this master plan shall provide for regional commercial uses, including:

An area designated for a pedestrian-oriented shopping street related to the unique development opportunities created by and contained within the couplet roadways north of Service Road (area a in Figure 1-5)

1.K.3. The master plan or amended Mitchell Road Corridor Specific Plan shall contain a detailed land use plan that includes:

a. Opportunities for a range of sizes and types of commercial businesses.

b. A central north-south aligned pedestrian street/major public space located between the couplet roadways

c. Opportunities for mixed use development along the pedestrian street specifically, and within the area bounded by the Mitchell Road couplets in general (e.g. retail on 1st floor, offices and housing on 2nd floors).

- d. Larger retail anchor stores at the north and south termini of the pedestrian street.
- e. Moderately-scaled parcels on the two couplet streets, with stores fronting directly on the street sidewalk.
- f. Larger-scale retail commercial uses west of Mitchell Road's western couplet.
- g. Commercial/office uses that generate lower traffic volumes within the area south of Service Road

Existing uses shall be integrated into the Land Use Plan wherever possible.

1.K.4. The master plan or amended Mitchell Road Corridor Specific Plan shall address the following urban design considerations:

- a. Building height, scale, massing, and general character:
 - The pedestrian street should have a traditional "main street" character, including continuous building frontage, a high percentage of windows on ground floor street facing elevations
 - A minimum length of blank walls
 - Buildings within the pedestrian area should be two to three stories in height, with building frontages typical of historic retail streets
 - Building height and scale along the couplet roads should be no more than three to four stories
 - Buildings within the larger retail complex to the west of Mitchell Road should not exceed three stories in height, and should be sited in traditional shopping center configurations, with parking surrounding the buildings
- b. Quality and character of public space
 - Pedestrians should have priority over the automobile within the primary core area
 - Buildings within the pedestrian area should front on the property line with generous sidewalks and street trees lining and defining the public walkway
 - Buildings should front on primary street property lines at all intersections, although diagonal entrances and/or arcades are encouraged at such locations
 - A distinctive landmark should be created at the northern and southern entries into the master plan area to serve as gateways into the new pedestrian-commercial area.

1.K.7. The master plan or amended Mitchell Road Corridor Specific Plan shall include the outline for a centralized retail management program for the pedestrian-oriented specialty retail area that addresses the following:

- a. Tenant recruitment
- b. Times of operation
- c. Coordinated promotion
- d. Employee parking
- e. Public safety

- f. Retail uses located within the public space
- g. Signs
- h. Maintenance of common space

Downtown

1.M.1. The City shall promote the commercial area downtown as a pedestrian, specialty retail, entertainment, cultural, and office and financial area.

Street and Roadway System

2.A.3. The City shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.

2.A.8. The City shall continue to participate in the countywide Congestion Management Plan.

2.A.9. The City shall encourage the provision of capacity-enhancing improvements to State Route 99 or improvements to other alternative routes or modes needed to accommodate increased local and regional traffic volumes and to relieve projected traffic congestion as identified in the Congestion Management Program analysis. To this end, the City will, together with the other affected and responsible agencies, participate in the planning, programming and identification of financing for these improvements.

Residential Streets

2.C.2. The City shall promote inner connectivity in its residential street patterns. Where cul-de-sacs are permitted, the City shall promote pedestrian and bicycle travel by including pathways as appropriate to connect cul-de-sacs to other streets or community facilities such as parks and schools.

2.C.3. The City shall require sidewalks for all streets in new residential areas.

2.5. The City shall conduct a review of local street width requirements in connection with planning for major new residential areas to identify the circumstances under which street widths within the existing right-of-way may be reduced to promote a more pedestrian-friendly environment

Automobile Parking

2.D.3. The City shall promote priority parking in safe and convenient locations for employee car pools and cyclists

Transit Facilities and Services

2.E.1. The City shall continue to plan and implement additional transit services that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand. To this end, the City will coordinate with Stanislaus County and City of Modesto transit agencies in providing and expanding intercity transit services.

2.E.2. The City shall consider the need for future transit right-of-way in reviewing and approving plans for development. Rights- of-way may either be exclusive or shared with other vehicles.

2.E.3. The City shall consider the transit needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act.

2.E.4. The City shall continue to support efforts to provide demand-responsive service ("paratransit") and other transportation services for those unable to use conventional transit.

2.E.5. The City shall require new development to reserve space for future public transit stops, with turnouts, where sufficient population or employment concentrations will warrant an existing or future route.

2.E.6. The City shall strive to ensure that transit routes serve those areas with the greatest need and the largest number of potential users.

2.E.7. The City shall investigate transit possibilities for the use of heavy rail right-of-way if railroads consider abandoning their rights-of-way.

2.7. In reviewing and approving areawide plans pursuant to Appendix A of this Policy Document, the City shall require consideration of transit opportunities, and reservation of transit stops where future population or employment concentrations warrant.

2.8. The City shall continue to contract with Laidlaw or other service providers as deemed appropriate to provide Dial-a-Ride services to Ceres residents.

Non-Motorized Transportation

2.F.1. The City shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provide connections between the city's major employment and housing areas and between its existing and planned bikeways. The bikeway plan is shown in Figure 2-2.

2.F.2. The City shall promote bicycling and walking through appropriate facilities, programs, and information.

2.F.3. The City shall pursue alternative sources of funding for the development and improvement of bikeways and pedestrian pathways.

2.F.4. The City shall require developers to finance and install pedestrian pathways, bikeways, and multi-purpose paths within new development, as appropriate.

2.F.5. The City shall encourage the development of adequate, convenient, and secure bicycle parking at employment centers, schools, recreational facilities, transit terminals, commercial businesses, and in other locations where people congregate.

2.F.6. The City shall require new multi-family residential, commercial and industrial developments to include bicycle facilities.

2.F.7. The City shall promote bicycle safety education to children and adults.

2.F.8. The City shall regard commuter bicycle routes as higher priorities than recreational routes.

2.F.9. The City shall consider the needs of bicyclists when new roadways are constructed and existing roadways are upgraded.

2.F.10. The City shall require new development to provide adequate rights-of-way to accommodate bikeways where needed on new collector, arterials, and expressway streets, and to contribute to the development of needed bikeways.

2.F.11. The City shall develop safe and pleasant pedestrian ways. To this end, the City shall ensure adequately wide sidewalks to accommodate pedestrian movement.

2.F.12. The City shall encourage separation of sidewalks from streets on arterials and major collector streets.

2.F.13. The City shall ensure that pedestrian access continues to be provided when the Pine Street and Whitmore Avenue overpasses are improved, and shall encourage improved pedestrian and bicycle facilities with these improvements.

2.9. The City shall revise the Zoning Ordinance and its development standards to incorporate bicycle parking standards into its parking requirements.

2.10. As appropriate and available, the City will use grant monies, license fees, and fines, along with capital improvement monies to help fund the development and installation of bikeways and bicycle parking facilities.

2.11. The City will review and include bicycle facilities in the Capital Improvement Program as necessary to implement the policies in this section.

Parks and Recreation

5.A.6. The City shall consider the following factors in the design of new parks:

a. Safety

- b. Security
- c. Maintenance
- d. Accessibility by various means of transportation

Air Quality -- General

6.F.1. The City shall cooperate with other agencies to develop a consistent and effective approach to regional air quality planning and management.

6.F.2. The City shall support the San Joaquin Unified Air Pollution Control District (SJVUAPCD) in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.

6.F.3. The City shall require major new development projects (e.g., those generating 4,000 to 5,000 average daily trips or exceeding the SJVUAPCD's small project exemption level) to submit an air quality analysis for review and approval. Based on this analysis, the City shall require appropriate mitigation measures.

6.F.4. The City shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality. The City shall submit development proposals to the SJVUAPCD for review and comment in compliance with the California Environmental Quality Act (CEQA) prior to consideration by the City.

6.F.5. The City shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts.

6.F.6. The City shall encourage development to be located and designed to minimize direct and indirect air pollutants.

6.F.7. In reviewing project applications, the City shall consider alternatives or amendments that reduce emissions of air pollutants.

6.F.8. The City shall encourage the use of EPA-certified woodstoves and fireplace inserts in lieu of wood burning fireplaces in new development. The City may limit the number of woodstoves per housing unit to ensure that homeowners are not relying on wood to heat their homes.

6.F.9. The City shall encourage inclusion of exterior electrical outlets and natural gas hookups, as appropriate, in new residential development in order to encourage the use of electrical, rather than gas-powered equipment, and to encourage the use of natural gas-fired barbecues.

Air Quality -- Transportation

6.G.1. The City shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

6.G.2. The City shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in City transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

6.G.3. As appropriate and as warranted by the demand for transit services, the City shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative.

IMPACTS

Growth in population and employment associated with development under the General Plan would result in a substantial increase in regional air pollutants. The incremental increase in regional emissions would exceed the San Joaquin Valley Unified Air Pollution Control District thresholds of significance.

The General Plan policies comprise a comprehensive strategy for reducing the air quality impacts of development and transportation systems. Application of all General Plan air quality policies would reduce the impact of future development in Ceres, but not to a less-than-significant level. Impacts on regional air quality would remain significant and unavoidable even after implementation of all General Plan policies regarding air quality.

MITIGATION MEASURES

The General Plan policies address reduction of air pollutant emissions in a variety of strategies related to land use and transportation. The following is an additional feasible strategy that could be incorporated into a policy:

Encourage inclusion of exterior electrical outlets and natural gas hookups in new residential development. This would allow use of electric, rather than gas-powered equipment and encourage use of natural gas fired barbecues.

Even with inclusion of this policy, the impact would remain significant and unavoidable.

CHAPTER 8

HEALTH AND SAFETY

This chapter assesses the natural and man-made health and safety impacts of development under the General Plan. The issues addressed in the chapter are seismic and geologic hazards, flood hazard, fire hazard, hazardous materials, emergency response, noise, and aircraft hazard.

8.1 SEISMIC AND GEOLOGIC HAZARDS

This section describes the likely health and safety effects associated with seismic and geologic hazards under the General Plan. Specifically, this section focuses on how development and associated population growth will impact future development in the city in terms liquefaction, ground shaking, and potential levee and dam failure caused by earthquakes.

ENVIRONMENTAL SETTING

Chapter 9 of the General Plan Background Report provides a generalized description of the seismic and geologic conditions affecting the Ceres area. Included are descriptions of local soil conditions, the proximity and historic activity of nearby faults, and the history and severity of earthquakes in the region.

There are no known faults within the valley portion of Stanislaus County; the only known fault that runs through Stanislaus County is the Tesla-Ortagalita Fault, located in the far western portion of the county in the Diablo Mountains. Seismic activity in other faults within the region, as described in the General Plan Background Report, could also affect the Planning Area.

The state earthquake protection law (California Health and Safety Code §19100 et seq.) requires that buildings be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum requirements are spelled out in the Uniform Building Code, which can be modified as necessary to meet local needs. The extent of groundshaking that buildings are designed to resist is based on the seismic zone in which they are located. Of the four seismic zones used nationwide, California includes the two zones of highest potential seismicity, Zones 3 and 4, with Zone 4 the most seismically active. Boundaries of the zones are determined by proximity to a fault considered capable of generating an earthquake of 6.0 to 7.0 magnitude or greater. The Planning Area is located entirely within Zone 3.

Groundshaking is the primary seismic concern for the city of Ceres. Ceres will experience the groundshaking effects of earthquakes, although the risk associated with this hazard in the Ceres area is low based on historical evidence of earthquake effects in Ceres. The California Division of Mines and Geology has produced a maximum expected earthquake intensity map which shows Ceres in the low severity zone. This zone could potentially experience groundshaking intensities of up to VI-VII in Mercalli intensity. The city borders on a moderate severity zone, which lies to the west of Ceres. This zone may experience maximum expectable groundshaking intensities of VII-VIII on the Mercalli Scale. Historic records suggest, however, that the probability of these maximum events occurring is very low.

Building codes are the primary tool governments possess to reduce seismic risk in structures. The City of Ceres has adopted the Uniform Building Code (UBC), requiring all new buildings in the city to meet the UBC's 1994 seismic requirements.

In addition to the structural damage caused by ground shaking, there are other ground effects caused by shaking. These are known as ground failure effects and include liquefaction, settlement, lateral spreading, lurch cracking, and earthquake induced landslides. Liquefaction potential within Ceres exists in low-lying areas comprising unconsolidated, saturated, clay-free sand and silts. Since there is no historic evidence to suggest that high ground shaking intensities are common, the risk of liquefaction in the Ceres area is relatively low.

Settlement, or subsidence, is the compaction of soils and alluvium caused by ground shaking. It occurs irregularly and may be partly controlled by bedrock surfaces, old lakes, sloughs, swamps, and stream beds. The amount of compaction may range from a few inches to several feet. Irregular compaction is most widespread and extreme in major earthquakes. It may occur as much as 75 to 89 miles from the epicenter and may amount to several feet even at that distance. Compaction is most likely to occur in areas, such as Ceres, which are underlain by soft water-saturated low-density alluvial material. However, there is no known history of an earthquake-related subsidence problems in the Planning Area.

Lurch cracking refers to fractures, cracks, and fissures produced by ground shaking, settling, compaction of soil, and sliding, and may occur many miles from the epicenter of an earthquake. These effects are characteristic of earthquakes large enough for significant ground motion to occur. The larger the earthquake magnitude, the more extensive the effect. This may damage streets, curbs, sewer, gas and water lines.

Lateral spreading is the horizontal movement or spreading of soil from a stream bank, the open side of a filled embankment, or the sides of a levee. Artificial fill areas which are improperly engineered or which have steep, unstable banks are most likely to be affected.

The potential for lurch cracking and lateral spreading is highest in areas where there is a high groundwater table, relatively soft and recent alluvium deposits, and where creek banks are relatively high. Conditions in the Planning Area create a very low potential for lurch cracking and lateral spreading.

Earthquakes can also cause landsliding and slumping; however, since Ceres is mostly level, these are not considered to be problems, except along the steep banks of the Tuolumne River.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess impacts resulting from development under the General Plan.

Assumptions

1. The potential for seismic activity, and relative ground shaking, surface rupture, and liquefaction was assumed to be compatible with the Zone 3 of the Seismic Risk Map for purposes of structure safety.
2. New construction will be subject to state and local seismic safety building standards.
3. Existing development, especially older structures built before the establishment of earthquake safety standards, were not considered as an impact of the General Plan.

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project will normally have a significant effect if it would expose people or structures to major geologic hazards or interfere with emergency response plans or emergency evacuation plans.

For purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in unacceptable risk to life or property from seismic or geologic hazards.

IMPLICATIONS OF THE LAND USE DIAGRAM

New structures built in accord with the Land Use Diagram could be subject to groundshaking or settlement caused by liquefaction, settlement, or lurch cracking. It is unlikely, however, that such shaking or settlement would be severe. Furthermore, all new buildings approved for development by the City would have to comply with the Uniform Building Code, so they would be have to constructed to withstand seismic effects. The most significant seismic and geologic hazards would be related to existing older, unreinforced masonry structures and structures built before modern building codes were in place. It is also conceivable that fire caused by ruptured gas or electric transmission lines could affect both new and old structures.

GENERAL PLAN POLICY RESPONSE

The following policies address seismic and geologic considerations, particularly as they affect new development:

Seismic and Geologic Hazards

7.A.1. The City shall require that new structures intended for human occupancy be designed and constructed according to Uniform Building Code Zone 3 requirements to minimize risk to the safety of occupants due to groundshaking.

7.A.2. City shall continue to support scientific geologic investigations which refine, enlarge, and improve the body of knowledge on active fault zones, unstable areas, severe groundshaking, and other hazardous conditions in the Ceres area.

7.A.3. The City shall require that new structures and alterations to existing structures comply with the current edition of the Uniform Building Code .

7.A.4. The City shall support ways to improve the structural safety and stability of older structures of designated historic significance while maintaining their historical character through the use of the State Historic Building Code.

7.A.5. The City shall continue to implement the Dangerous Building Code to address older buildings that may at risk for seismic or geologic hazards.

7.A.6. The City shall avoid siting of structures across soil materials of substantially different expansive properties.

IMPACTS

The implementation of these policies, along with continued enforcement of the Uniform Building Code, will ensure that seismic and geologic impacts associated with development under the General Plan would be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

8.2 FLOOD HAZARD

This section describes the likely health and safety effects associated with flood hazard under implementation of the General Plan.

ENVIRONMENTAL SETTING

Chapter 9 of the General Plan Background Report provides a generalized description of the flood hazard conditions affecting the Planning Area. The following is a summary of the background information pertinent to flood hazards.

Flooding

Flooding has been a recurring problem throughout the history of Stanislaus County. Three major floods have taken place in the last 30 years. The biggest flood in the county's history occurred in 1861, and covered the valley with a body of water 250 to 300 miles long and 20 to 60 miles wide). Today, the potential for such major flooding in Ceres is quite remote, due to the construction of the Don Pedro Dam on the Tuolumne River. Smaller, localized flooding on the Tuolumne River north of Ceres could affect the northernmost part of the Planning Area.

The 100-year flood is the flood event that has a one percent chance of occurring in any given year. This is considered to be a severe flood, but one with a reasonable possibility of occurrence for purposes of land use planning, property protection, and human safety. The Federal

Emergency Management Agency (FEMA) prepares maps showing areas which are likely to flood during a 100-year flood event. Figure 9-2 in the General Plan Background Report shows the 100-year floodplain in the Planning Area, located in the northernmost part of the Planning Area adjacent to the Tuolumne River. The 100-year floodplain is located outside the current (1994) Ceres city limits, therefore the City does not currently participate in the National Flood Insurance Program.

Dam Failure Inundation

The risk of dam failure is remote. Dam failure can occur under three general conditions: earthquake, structural instability, or an intense rainfall in excess of a dam's holding capacity. According to the Stanislaus County General Plan, Ceres is not within the inundation areas for New Melones or Tulloch Dams. Widespread flooding would occur along both sides of the Tuolumne River in the event of the failure of the dam on the Don Pedro Reservoir, but would not significantly affect the Planning Area. The flooding area would be limited to the northernmost part adjacent to the Tuolumne River, similar to what would occur in a 100-year flood event. Since much of Stanislaus County would be affected by dam failure inundation, however, Ceres would be a logical area for assisting other cities and agencies that would be affected by flooding in the event of failure.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess impacts resulting from development under the General Plan. The analysis was conducted by evaluating known and anticipated flooding and dam inundation hazards in relationship to the areas designated for development on the General Plan Land Use Diagram.

Assumptions

1. Flooding impacts are assumed to be generally limited to defined floodways and floodplains as defined by FEMA's Flood Insurance Rate Maps.
2. Potential inundation resulting from dam failure is assumed to affect Ceres only as it relates to the Don Pedro Reservoir Dam.
3. The analysis generally does not address impacts associated with flooding less frequent than the 100-year flood event. Storm drainage is addressed in Chapter 5, Public Facilities and Services.
4. Existing development located within the Planning Area may continue to be exposed to flooding and dam inundation hazards, but this is not considered an impact of new development under the General Plan.
5. In the event of major flooding or dam failure, the City of Ceres will respond according to the City and County Emergency Response Plans.

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project will normally have a significant effect if it will cause substantial flooding or interfere with emergency response plans or emergency evacuation plans.

For purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would conflict with the Stanislaus County Emergency Plan, or increase risk to life or property from development in the designated 100-year flood plain.

IMPLICATIONS OF THE LAND USE DIAGRAM

100-Year Flood Hazard

The FEMA Flood Insurance Rate Map (FIRM) delineates those areas subject to the 100-year flood. Based on the FIRM, only the northernmost areas adjacent to the Tuolumne River are within the 100-year floodplain.

Within the Urban Growth Area, the General Plan provides for only minimal new development potential within the 100-year floodplain; almost all of which is designated for commercial development and small areas of very-low density development. These areas include some existing residential, commercial, and industrial development. Larger undeveloped areas within the 100-year floodplain east of Ustick Road are designated Adjacent Urban and are within the City of Modesto's sphere of influence.

Dam Failure Inundation

Inundation flooding associated with the failure of the Don Pedro reservoir and dam would affect land in the northernmost part of the Planning Area.

GENERAL PLAN POLICY RESPONSE

The following policies seek to protect development from damage, and to require new development within identified floodplains to be designed to avoid flood damage:

Flood Hazards

7.B.1. The City shall implement floodplain zoning and undertake other actions required to comply with state floodplain requirements, upon annexation of areas within the floodplain.

7.B.2. The City shall require evaluation of potential flood hazards prior to approval of development projects. The City shall require proponents of new development to submit accurate topographic and flow characteristics information. This will include depiction of the 100-year floodplain boundaries under fully-developed, unmitigated runoff conditions.

7.B.3. The City shall require flood-proofing of structures in areas subject to flooding (upon annexation).

7.B.4. The City shall continue to work closely with the Federal Emergency Management Agency, U.S. Army Corps of Engineers, and Reclamation Board in defining existing and potential flood problem areas and solutions.

7.B.5. The City shall recognize floodplains as a potential public resource to be managed and maintained for the public's benefit and, where possible, shall view flood waters as a resource to be used for waterfowl habitat, aquifer recharge, fishery enhancement, agricultural water supply, and other suitable uses.

The following policies seek to ensure the maintenance of an Emergency Response Plan to effectively prepare for, respond to, recover from, and mitigate the effects of natural or technological disasters.

Emergency Response

7.H.1. The City shall periodically update the City of Ceres Emergency Plan, as necessary, to ensure that an adequate plan and program can be activated in the event of an emergency.

7.H.2. The City shall continue to coordinate emergency preparedness, response, recovery, and mitigation activities with Stanislaus County, special districts, service agencies, voluntary organizations, other cities within the county, surrounding cities and counties, and state and federal agencies.

7.H.3. The City shall continue to provide a high-visibility promotional program to inform the general public of emergency preparedness and disaster response procedures.

7.H.4. The City shall maintain the capability to effectively respond to emergency incidents.

7.H.5. The City shall maintain an emergency operations center to coordinate emergency response, management, and recovery activities.

7.H.6. The City shall ensure that the siting of critical emergency response facilities such as hospitals, public safety facilities, dispatch centers, emergency operations centers, and other emergency service facilities and utilities have minimal exposure to flooding, seismic and geological effects, fire, and explosions.

IMPACTS

Flooding

The General Plan provides for very little new development within the 100-year floodplain areas within the Urban Growth Area. Combined with the policies of the General Plan, this would ensure no development in areas subject to 100-year flooding without adequate mitigation or

floodproofing of structures. Other areas within the 100-year floodplain west of SR 99 are designated as Adjacent Urban and located within the city of Modesto or its sphere of influence. Any new development in these areas would be governed by the City of Modesto; the City of Ceres would have no jurisdiction over these areas. The impact of the General Plan related to flooding would therefore be less-than-significant

Dam Failure Inundation

The General Plan also provides for very little development that would be subject to flooding in the unlikely event of failure of the Don Pedro reservoir dam. Furthermore, there are many roads that would provide access to the south, allowing for quick evacuation of these areas if needed. The policies of the General Plan call for continued updating and implementation of the City of Ceres's Emergency Response Plan. These efforts would ensure that the potential impacts related to dam failure inundation would be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

8.3 FIRE HAZARDS

ENVIRONMENTAL SETTING

Fire hazards are described in Chapter 9 of the General Plan Background Report. Both open space and urban (structural) fire hazards in Ceres create the potential for injury, loss of life, and property damage. Urban fires primarily involve residential, commercial, and industrial structures and are typically the result of man-made causes. Open space fires affect grass, brush lands, agricultural lands, as well as any structures on these lands.

Urban fire hazards in Ceres are greatest in areas containing older buildings which do not meet current building codes. As part of the City's dangerous building abatement program, however, hazardous buildings which are brought to the City's attention are either torn down or retrofitted to meet the current fire and other safety codes. New structures are required to have heat or smoke detectors installed in strategic locations throughout the building.

The outbreak and spread of wildland fires in the Planning Area is a potential danger, particularly during the summer months. Potential for fire hazards in agricultural areas is relatively low; the riverbluff areas north of the city pose a fire hazard during periods when dry grass and brush exist.

METHODOLOGY

This section describes the assumptions and thresholds of significance developed to assess impacts resulting from development under the General Plan. The analysis was conducted by considering existing and anticipated open space and urban fire hazards described in the General

Plan Background Report in relation to the areas proposed for new development under the General Plan.

Assumptions

New development in the Planning Area will require expanded fire protection services and will meet General Plan levels of service and response time standards. (See Fire Protection section in Chapter 5, Public Facilities and Services).

Thresholds of Significance

For purposes of this EIR, an impact is considered significant if adoption or implementation of the General Plan would result in a significant increase in the exposure of people to major fire hazards.

IMPLICATIONS OF THE LAND USE DIAGRAM

Urban Fire Hazard

New development under the General Plan will increase the number of structures and persons that will be subject to potential fires simply by increasing the size of the building stock and the number of residents and workers in Ceres.

Open Space Fire Hazard

The General Plan will only modestly increase the urban-open space interface. The cultivated agricultural lands around Ceres represent a low fire hazard. The General Plan will not substantially increase development adjacent to the river bluff areas.

GENERAL PLAN POLICY RESPONSE

The following policies serve to minimize the risk of loss of life, injury, and damage to property and watershed resources resulting from unwanted fires:

Fire Hazards

7.C.1. The City shall require that new development meets state, county, and local fire district standards for fire protection.

7.C.2. The Emergency Services Division of the City Public Safety Department shall review development proposals for compliance with fire safety standards.

7.C.3. The City shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.

7.C.4. The Emergency Services Division of the City Public Safety Department shall continue education programs in schools, service clubs, organized groups, industry, utility companies, government agencies, press, radio, and television in order to increase public awareness of local fire hazards.

7.C.5. The City shall encourage and promote installation and maintenance of smoke detectors in existing residences and commercial facilities that were constructed prior to the requirement for their installation.

7.C.6. The City shall develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures.

IMPACTS

Urban Fire Hazard

The policies of the General Plan and existing code provisions should ensure that all new development in Ceres will meet construction standards for fire safety and provide its fair share contribution to funding fire protection facilities. As a result, the urban fire hazard impacts related to development under the General Plan would be less-than-significant.

Open Space Fire Hazard

The policies of the General Plan and ongoing fire prevention efforts should ensure that all new development under the General Plan will meet standards for fire safety, including the removal of grass and brush from urban parcels and maintaining the required structural set back from property lines to ensure fire safety. As a result, the open space fire hazard impacts related to development under the General Plan would be less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

8.4 HAZARDOUS MATERIALS

ENVIRONMENTAL SETTING

Chapter 9 of the General Plan Background Report describes hazardous materials setting in the Planning Area. Ceres has a substantial number of industries and activities that involve transport, storage, or use of toxic or hazardous materials. In Ceres, the most prominent hazardous materials include agricultural chemicals (i.e., pesticides, insecticides, herbicides, fumigants), petroleum products, and chemicals used in industrial processing (i.e., solvents). These materials could represent safety hazards in such events as leakage from bulk storage areas of petroleum and gaseous products, railroad derailment, freeway vehicular accidents, and hazardous materials spills within or near the Planning Area.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess impacts resulting from development under the General Plan.

Assumptions

1. Increased development in the Planning Area, particularly commercial and industrial development, will result in increased transport, storage, and use of toxic or hazardous materials.
2. The City's primary mechanism for addressing hazardous materials is, and will continue to be, the Stanislaus County Hazardous Waste Management Plan, adopted in 1993.
3. All federal, state and local regulations governing the production, uses, storage and transportation of hazardous materials will be strictly enforced.

Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, an impact is considered significant if adoption or implementation of the General Plan would create a potential public health hazard or involve the use, production, or disposal of materials which pose a hazard to people, animals or plant populations.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development under the General Plan will result in the increased possibility of exposure to hazardous materials. This exposure is expected to be greatest in areas where hazardous materials would be used in large quantities, such as the areas designated for industrial development, primarily in the western and southwestern parts of the Planning Area. To a lesser extent, use of common household hazardous materials will continue in new residential and commercial areas. Local highways and rail lines will continue to serve as routes for the transport of significant amounts of hazardous materials, thereby exposing nearby people and property to potentially hazardous conditions. Crows Landing Road, as a major connection between SR 99 and I-5, may also be a significant transport route for hazardous materials.

GENERAL PLAN POLICY RESPONSE

The following policies serve to minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous materials wastes:

Hazardous Materials

- 7.G.1. The City shall ensure that the use and disposal of hazardous materials in the city complies with local, state, and federal safety standards.

7.G.2. The City shall require preliminary (Phase 1) soil investigation prior to approving residential areawide plans.

7.G.3. The City shall discourage the development of residences or schools near known hazardous waste disposal or handling facilities.

7.G.4. The City shall review all proposed development projects that manufacture, use, or transport hazardous materials for compliance with the County Hazardous Waste Management Plan.

7.G.5. The City, in conjunction with the County, shall strictly regulate the storage of hazardous materials and wastes.

7.G.6. The City shall require secondary containment and periodic examination for storage of large quantities of toxic materials.

7.G.7. The City shall ensure that industrial facilities are constructed and operated in accordance with current safety and environmental protection standards.

7.G.8. The City shall require that new industries that store and process hazardous materials provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City.

7.G.9. The City shall require that applications for development projects that will generate significant quantities of hazardous wastes or utilize hazardous materials include detailed information on hazardous waste reduction, recycling, and storage.

7.G.10. The City shall, in the circumstances required by state law, require that businesses that handle hazardous materials prepare emergency response plans.

7.G.11. The City shall encourage the State Department of Health Services and the California Highway Patrol to review permits for radioactive materials on a regular basis and to promulgate and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.

7.G.12. The City shall review development proposals in locations that may be inappropriate for hazardous material storage, maintenance, use, and disposal facilities (i.e., near schools, nursing homes) to ensure that the proposed development would not pose significant safety risks.

7.G.13. The City shall work with other agencies to ensure an adequate countywide response capability to hazardous materials emergencies.

7.G.14. The City shall provide the public, industry, agriculture, and local government with the information needed to take rational steps to minimize, recycle, treat, dispose, and otherwise manage hazardous wastes in Ceres.

7.G.15. The City, in conjunction with the County, shall provide for the education of small quantity, household, and agricultural generators regarding their responsibilities for source reduction and proper and safe hazardous waste management.

7.G.16. The City, with the assistance of the County, shall develop and maintain complete and accurate information on the types, quantities, sources, and management of all hazardous wastes generated in Ceres to aid in management planning and emergency response.

7.G.17. The City, with the assistance of the County, shall provide for safe and efficient hazardous waste emergency response and contaminated site cleanup.

IMPACTS

The General Plan will allow for increased commercial and industrial development that potentially uses hazardous materials. Most of the areas designated for General Industrial (GI), which would be expected to include those industries with the most use of toxic and hazardous materials, are separated from residentially-designated areas, or would be required to provide buffering, consistent with General Plan policies.

The General Plan would allow for additional development along Crows Landing Road and the Union Pacific Rail line, exposing additional people if a hazardous spill occurs.

The successful implementation of the policies of the General Plan, along with ongoing administration of the City's Emergency Response Plan, the Ceres Household Hazardous Waste Element (HHWE), the Stanislaus County Hazardous Waste Management Plan, and all pertinent federal and state regulations, would minimize the hazardous materials impacts of development under the General Plan to a less-than-significant level.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

8.5 EMERGENCY RESPONSE

This section focuses on how new development under the General Plan could result in increased demands on emergency response services.

ENVIRONMENTAL SETTING

City and county emergency response procedures are designed to respond to a range of events, both regional and localized. Regional events include earthquakes, dam failure, or severe flooding. Potential localized disasters in Ceres include the following: PG&E gas line breakage, railroad derailments, freeway vehicular accidents, a break in the jet propulsion fuel line adjacent to the Southern Pacific rail line, and a hazardous material spill within or near the city.

The City of Ceres has prepared and adopted a comprehensive Multi-Hazard Functional Plan to serve as the City's preparedness plan. This disaster operations plan sets forth the organization and administration of disaster response efforts such as debris removal, evacuation and emergency communications, law enforcement, fire protection and rescue, the provision of health care and emergency shelter, allocation of supplies, and the maintenance of critical facilities and infrastructure.

METHODOLOGY

This section describes the assumptions and thresholds of significance developed to assess impacts resulting from development estimated for the Urban Growth Area under the General Plan.

Assumptions

Existing emergency services will continue to operate, including the City of Ceres' Public Works Department and Public Safety Departments, the Stanislaus County Department of Environmental Health, the Stanislaus County Sheriff's Department, and the California Highway Patrol.

Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, an impact is considered significant if adoption or implementation of the General Plan would interfere with emergency response plans or emergency evacuation plans.

IMPLICATIONS OF THE LAND USE DIAGRAM

New development under the General Plan would increase the demand for emergency response services provided through local police and fire departments and emergency response organizations. Natural and man-made hazards associated with the existing urban development would also continue to need such services. Generally, new development called for under the General Plan would create a pattern that could be easily served by existing emergency services providers.

GENERAL PLAN POLICY RESPONSE

The following policies seek to ensure the maintenance of emergency response procedures to effectively prepare for, respond to, recover from, and mitigate the effects of natural or technological disasters:

Emergency Response

7.H.1. The City shall periodically update the City of Ceres Emergency Plan, as necessary, to ensure that an adequate plan and program can be activated in the event of an emergency.

7.H.2. The City shall continue to coordinate emergency preparedness, response, recovery, and mitigation activities with Stanislaus County, special districts, service agencies, voluntary organizations, other cities within the county, surrounding cities and counties, and state and federal agencies.

7.H.3. The City shall consider a promotional program to inform the general public of emergency preparedness and disaster response procedures.

7.H.4. The City shall maintain the capability to effectively respond to emergency incidents.

7.H.5. The City shall maintain an emergency operations center to coordinate emergency response, management, and recovery activities.

7.H.6. The City shall ensure that the siting of critical emergency response facilities such as hospitals, public safety facilities, dispatch centers, emergency operations centers, and other emergency service facilities and utilities have minimal exposure to flooding, seismic and geological effects, fire, and explosions.

IMPACTS

Implementation of the policies of the General Plan, along with ongoing administration of the City's Emergency Response Plan and compliance with all pertinent federal and state regulations, should ensure that the emergency response impacts of development under the General Plan are less-than-significant.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

8.6 AIRCRAFT HAZARD

This section describes the likely health and safety effects associated with aircraft hazards under the General Plan. Specifically, this section focuses on safety hazards associated with the Modesto City-County Airport, located just north of Ceres, on the north side of the Tuolumne River in Modesto, via Mitchell Road.

ENVIRONMENTAL SETTING

Aircraft hazards are described in Chapter 9 of the General Plan Background Report. Safety issues associated with airports are primarily concerned with hazards posed to flights and hazards posed to those on the ground. Flight hazards may be physical, such as a tall structure that would obstruct airspace; visuals such as the glare caused by lights; or electric, which could include any electric uses that interferes with aircraft instruments or communication systems. In addition, with urban growth comes the need for increased airport operations, and this increased activity generates increased aircraft hazard potential.

The current basis of airport planning around the Modesto City-County Airport has been the Stanislaus County Airport Land Use Commission (ALUC) Airport Land Use Commission Plan, adopted in 1978. The plan and its regulatory requirements are described in Chapter 1 of the General Plan Background Report.

METHODOLOGY

This section describes the assumptions and thresholds of significance used to assess impacts resulting from development under the General Plan. The analysis was conducted by comparing areas with potential aircraft crash hazards with the area designated for development under the General Plan.

Assumptions

Aircraft crash hazards are evaluated in two ways. First, according to the land use regulations included in the Stanislaus County Airport Land Use Commission Plan. Given that the ALUC Plan is over 20 years old, and airport planning requirements have changed during this period, this analysis also examines the potential impacts based on current airport planning standards (Caltrans' Airport Land Use Planning Handbook) these are the standards that state law requires to be used when the ALUC updates the plan.

Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, an impact is considered significant if adoption or implementation of the General Plan would create a potential public health hazard.

IMPLICATIONS OF THE LAND USE DIAGRAM

The Land Use Diagram designates land and the various zones and allowable uses around the airport based on the methodology of the California Department of Transportation's Airport Land Use Planning Handbook, December 1993, as shown in Figure 8-1 and described in Table 8-1. This handbook is the current planning standards required by the state to be used in preparing or updating airport land use plans.

The Land Use Diagram is not consistent with the ALUC Plan for land within the Airport Surface and Transitional Zone consistent with the requirements of the ALUC Plan, shown in Figure 8-2. Continued reliance on the ALUC Plan requirements would generally allows for lower densities than required under the Airport Land Use Planning Handbook.

TABLE 8-1

LAND USE COMPATIBILITY FOR MODESTO CITY-COUNTY AIRPORT
(South End Only)

(See Figure 8-1)

Area	Zone	Density of Use	Residential Land Uses	Special Functions*
1	Runway Protection Zones	Maximum 10 people per acre	New residential development prohibited	Special functions should be prohibited
2	Inner Safety Zone	Nonresidential lands uses should be limited to activities that attract relatively few people to a given area. Shopping centers, eating establishments, meeting halls, multi-story office buildings, and labor-intensive manufacturing plants are examples of uses which should be prohibited. Measured on the density of use scale, the maximum concentrations of people generated should be no more than 40 to 60 per acre. Residential uses, if not deemed unacceptable because of noise, should be limited to very low densities—10 acres or more per dwelling unit.		Special functions should be prohibited.
3	Inner Turning Zone	The criterion for the number of people per acre allowed for uses in this zone should either be the same as for the inner safety zone or can be adjusted slightly upward, but no higher than the levels set for the outer safety zone. The minimum lot size criteria for residential uses should be set somewhere in the range encompassed by the inner and outer safety zones; that is between 2 and 10 acres. Special functions should be prohibited.		
4	Outer Safety Zones	The types of land uses which represent concerns within outer safety zones are similar to those in the inner safety zones, but somewhat higher densities of use can be considered acceptable. For example, whereas shopping centers and multi-story office buildings are unacceptable closer to the runway end, small neighborhood shopping centers and two-story offices are reasonable within this more distant zone. Concentrations of people should be limited to no more than 60 to 100 per acre. Typical subdivision density residential should be avoided in this zone. Rural residential uses with lot sizes in the 2 to 5 acre range can be considered acceptable. Most special functions, particularly schools, hospitals, and so on, should be avoided in the outer safety zone.		
5	Sideline Safety Zones	Aviation related land uses on airport property are considered acceptable. Where the sideline safety zone encompasses non-aviation property, either on or off the airport, the safety criteria for the inner turning zone or outer safety zone are generally applicable. However, land uses involving more than 40 to 60 people per acre should be avoided in locations lateral to the runway ends; if necessary, higher density uses should be situated laterally from near the mid-point of the runway. Generally, the same as the inner turning zone or outer safety zone. Generally, the same as the inner turning zone or outer safety zone.		
6	Traffic Pattern Zone	Only very large assemblies of people, in the 150 or more people per acre range, need to be avoided. In small communities, typical residential subdivision densities of 4 to 6 dwelling units per acre are acceptable from a safety perspective. In urban areas, even higher densities may be reasonable, especially if development is clustered to provide open space. Schools, hospitals, and nursing homes should be avoided in traffic pattern zones unless no other feasible alternatives are available.		

*Special functions include elementary and secondary schools, college campuses, hospitals, nursing homes, and other similar land uses for which the significant common element is the relative inability of the people occupying the space to move out of harm's way; and functions such as aboveground storage of large quantities of flammable materials or other hazardous

substances, which could substantially contribute to the severity of an aircraft accident if they were to be involved in one.

Source: Caltrans Division of Aeronautics, Airport Land Use Planning Handbook, December 1993.

GENERAL PLAN POLICY RESPONSE

The following General Plan policies will minimize the risk of loss of life, injury, damage to property, and economic and social dislocations resulting from airport hazards:

Aircraft Crash Hazards

7.F.1. The City shall work with Stanislaus County to ensure that new development around airports does not create safety hazards such as lights from direct or reflective sources, smoke, electrical interference, hazardous chemicals, or fuel storage in violation of adopted safety standards.

7.F.2. The City shall oppose changes in flight patterns that would increase flight activity over Ceres and significantly increase noise or safety concerns.

IMPACT

The Land Use Diagram designates land consistent with densities and uses identified as permissible based on the safety standards in the Airport Land Use Planning Handbook, therefore the aircraft crash hazards are less-than-significant. The General Plan is inconsistent with the ALUC Plan, allowing for higher densities than would be permitted in the ALUC Plan. The ALUC Plan, adopted in 1978, is based on older planning standards. Inconsistency with the ALUC Plan does not pose significant aircraft crash hazards.

MITIGATION MEASURES

No mitigation measures beyond the policies and programs of the General Plan are necessary.

8.7 NOISE

ENVIRONMENTAL SETTING

The General Plan Background Report contains a detailed description of Ceres's existing noise environment. Noise in the Ceres area is predominantly the result of traffic on major highways (i.e., SR99) and major arterial streets and roads, railroads, and industrial operations.

A detailed description of the existing noise environment is contained in the Background Report. The existing noise environment throughout the majority of the City of Ceres is dominated by traffic on State Route (S.R.) 99 and major arterial streets and roads.

Operations along the Southern Pacific Transportation Company (SPTCo) and the Atkinson Topeka & Santa Fe (AT&SF) railroad tracks also occur within the City of Ceres. The SPTCo track is a mainline track which travels north/south adjacent to S.R. 99. The AT&SF has a local track servicing industrial areas, and travels north/south adjacent to the west portion of the City of Ceres.

Industrial and other fixed noise sources are dispersed throughout the City. The major fixed noise sources identified in the Background Document include Northern Refrigerated Transportation Inc., Proctor and Gamble, California Vegetable Concentrates, tire and muffler shops, metal fabricating shops, large HVAC systems, commercial developments, and loading docks.

Noise related to aircraft operations were identified for the Modesto City-County Airport. Aircraft noise levels were due primarily to arrivals and departures along parallel runways 10L/28R and 10R/28L. These arrivals and departures come within close proximity to the northeast corner of the city.

A community noise survey was conducted throughout the city of Ceres away from major noise sources, in areas containing noise-sensitive land uses. Noise levels ranged between 53 dB and 59 dB Ldn.

METHODOLOGY

This section describes the assumptions and thresholds of significance developed to determine noise impacts.

Assumptions

Development will occur based upon the Land Use Diagram. As buildout occurs, increased traffic is assumed to result in increased traffic noise. In addition, industrial facilities and other stationary noise sources will be developed. Rail activity and demand at existing aviation facilities are also expected to increase.

Increases in traffic noise levels are based upon changes in traffic volumes. Travel speeds along S.R. 99 are expected to increase based upon recent changes. However, travel speeds along other roadways within the city, truck mix and distributions of traffic throughout the day are assumed to remain the same. Traffic volume data was provided by Dowling Associates Transportation Consultants. The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to predict distances to Ldn contours for all highways and major roadways.

It is difficult to determine the noise impacts associated with future industrial facilities. However, based upon the proposed future land use, areas of potential noise impacts associated with new industrial facilities can be generally described.

SPTCo and AT&SF railroad officials were not able to provide estimates of future railroad activity. Therefore future railroad noise levels were assumed to be the same. Railroad noise level measurements and accepted modeling techniques were used to determine the distances to Ldn contours.

Future aircraft noise levels were based upon the Draft EIR/EA for the Modesto City-County Airport Master Plan, 1988.

Thresholds of Significance

Impacts are considered significant if noise levels exceed the standards contained in the General Plan Policy Document.

Another method of determining the significance of noise impacts is by the expected change in ambient noise levels which will occur as a result of the project. Expected reactions to changes in ambient noise levels have been reported by Egan and others for persons who are exposed to noise sources that are quantified by metrics that define short-term exposure (e.g., hourly Leq, Lmax and Ln). These metrics are usually used to describe noise impacts due to industrial operations, machinery and other sources that are not associated with transportation. According to Egan and others, an increase of at least 3 dB is usually required before most people will perceive a change in noise levels, and an increase of 5 dB is required before the change will be clearly noticeable. The common practice has been to assume that a minimally perceptible increase of 3 dB represents a significant increase in ambient noise levels.

Table 8-2 is based upon recommendations recently (August 1992) made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. Their recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been assumed for this analysis that they are applicable to all sources of noise that are described in terms of cumulative noise exposure metrics such as the Ldn or CNEL. These metrics are generally applied to transportation noise sources, and define noise exposure in terms of average noise exposure during a 24-hour period with penalties added to noise that occurs during the nighttime or evening. Ldn or CNEL are often defined in terms of an average annual day, and are therefore quite different than the short-term noise level descriptors described above.

TABLE 8-2

SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE

Ambient Noise Level Without Project (Ldn or CNEL)	Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON), as applied by Brown-Buntin Associates, Inc.

IMPLICATIONS OF THE LAND USE DIAGRAM

Traffic Noise Levels

Development according to the Land Use Diagram would result in an increase in traffic noise levels. Table 8-3 shows the distances to the traffic noise contours for all highways and major roadways within the City of Ceres for the year 2015, as mapped in the Policy Document. Table 8-3 also shows the relative change in noise levels from those reported in the Background Report. The potential exists for traffic noise levels at existing and future land uses to exceed acceptable noise exposure. Future noise-sensitive uses could be located inside the 60 dB Ldn roadway noise contours. Increased noise levels associated with traffic may encroach upon existing noise-sensitive land uses, or further increase noise levels already in excess of 60 dB Ldn.

Where an increase in traffic noise levels exceeds 3 dB Ldn, the potential for a significant noise impact has been identified.

TABLE 8-3

NOISE CONTOUR DATA
 DISTANCE (FEET) FROM CENTER OF ROADWAY
 TO Ldn CONTOURS

Segment Description dB, at 100 feet	Existing		Year 2015		Difference
	60 dB	65 dB	60 dB	65 dB	
State Route 99					
1					
2					
South Boundary to Mitchell Road					
Mitchell Road to North Boundary	1511				
1669	701				
775	2362				
2935	1096				
1362	+2.9				
+3.7*					
Hatch Road					
3					
4					
5					
6					
7					
8					
State Route 99 to Herndon Road					
Herndon Road to Richland Avenue					
Richland Avenue to Central Avenue					
Central Avenue to Moffet Road					
Moffet Road to Mitchell Road					
Mitchell Road to Boothe Road	453				
464					
451					
429					
404					
281	210				
215					
209					
199					
187					
130	631				
767					
741					
747					
741					

684 293

356

344

347

344

317 +2.2

+3.3*

+3.2*

+3.6*

+3.9*

+5.8*

Herndon Road

9

10

11

12 River Road to Nadine Avenue

Nadine Avenue to Hatch Road

Hatch Road to Evans Way

Evans Way to Whitmore Avenue 72

78

75

60 33

36

35

28 80

84

94

59 37

39

44

27 +0.7

+0.4

+1.5

-0.1

Bystrum Road

13

14 Sonora Avenue to Nadine Avenue

Nadine Avenue to Herndon Road 65

117 30

54 125

127 58

59 +4.3*

+0.6

Richland Avenue

15

16 Nadine Avenue to Hatch Road

Hatch Road to Herndon Road 97

87 45

40 112

121 52

56 +0.9

+2.1

Central Avenue

17

18

19 Hatch Road to Richard Way

Richard Way to Caswell Avenue

Caswell Avenue to Whitmore Avenue 73

78

74 34

36

34 87

124

94 40

58

44 +1.2

+3.0*

+1.6

Moffet Road

20

21 Hatch Road to Fowler Road

Fowler Road to Whitmore Avenue 69

93 32

43 73

111 34

51 +0.3

+1.2

Mitchell Road

22

23

24

25

26 River Road to Hatch Road

Hatch Road to Fowler Road

Fowler Road to Whitmore Avenue

Whitmore Avenue to Roeding Avenue

Roeding Avenue to South Boundary 624

452

442

411

397 289

210

205
191
184
653
611
620
385
303
283
288
179
+2.4
+2.1
+2.7
-0.4
Morgan Road
27
28
29
30
31
32
33
34
35
Morgan Road to Blaker Road
Blaker Road to Herndon Road
Herndon Road to Central Avenue
Central Avenue to Moffet Road
Moffet Road to Mitchell Road
Mitchell Road to Boothe Road
Boothe Road to East Boundary
121
162
177
182
188
96
87
56
75
82
84
87
45

818

380

+1.8

State Route 99 to Whitmore Avenue 77 36 95 56 +1.4

Whitmore Avenue

West Boundary to Morgan Road

125

58

40 121

182

197

222

247

259

231

249 56

85

91

103

115

120

107

115 -0.1

+2.7

+1.3

+1.5

+2.0

+2.1

+5.7*

+6.8*

Pine Street

36 Central Avenue to Railroad Avenue 89 41 99 46 +0.6

Service Road

37	
38	
39	
40	
41	Morgan Road to Blaker Road
	Blaker Road to Central Avenue
	Central Avenue to Moffet Road
	Moffet Road to Mitchell Road
	Mitchell Road to East Boundary 100
108	
127	
160	
108	46
50	
59	
74	
50	444
458	
517	
544	
469	206
213	
240	
252	
218	+9.7*
+9.4*	
+9.1*	
+8.0*	
+9.6*	

ADDITIONAL ROADWAY SEGMENTS: (Not analyzed for Existing Scenario)

Redwood Road

1	East Boundary to State Route 99	--	--	57	26	--
---	---------------------------------	----	----	----	----	----

Central Avenue

2	
3	Railroad Avenue to Service Road
	Service Road to South Boundary --
--	--
--	115
116	53
54	--
--	

Blaker Road

4	Whitmore Avenue to Service Road	--	--	91	42	--
---	---------------------------------	----	----	----	----	----

Service Road

5	Crows Landing Road to Morgan Road	--	--	353	164	--
---	-----------------------------------	----	----	-----	-----	----

Roeding Road

6
7 State Route 99 to Mitchell Road
Mitchell Road to East Boundary --

-- --
-- 100
122 46
56 --

Faith Home Road

8
9 Redwood to Roeding Road
Roeding Road to Hatch Road --

-- --
-- 500
532 232
247 --

Boothe Road

10
11
12 Redwood to Roeding Road
Roeding Road to Whitmore Avenue
Whitmore to Hatch Road --

-- --
-- --
-- 75
71
151 35
33
70 --

Crows Landing Road

13
14 South Boundary to Service Road
Service Road to Whitmore Avenue --

-- --
-- 196
251 91
117 --

--
* Denotes an increase in traffic noise levels of 3 dB Ldn or greater.

Development under the Land Use Diagram is generally expected to result in an increase in noise levels due to traffic. It would take a doubling of traffic to increase noise levels by approximately 3 dB.

Railroad Noise Levels

Implementation of the general plan land use diagram could result in noise-sensitive land uses encroaching within close proximity of the railroad tracks. This could result in individuals being exposed to noise levels which may be considered unacceptable. The approximate distance to the 60 dB Ldn noise contour for the main north/south SPTCo track is 735 feet from the track centerline. The approximate distance to the 60 dB Ldn noise contour for the AT&SF track is 25 feet. These distances does not account for shielding from buildings or topography, and are considered worst case scenarios. Noise-sensitive land uses located inside the 60 dB Ldn contours of the tracks would be considered exposed to unacceptable noise levels.

Implementation of the general plan land use diagram for 2015 could result in additional noise-sensitive land uses encroaching within close proximity of the railroad tracks. This could result in additional individuals being exposed to noise levels which may be considered unacceptable.

Industrial and Other Fixed Noise Sources

As additional development occurs throughout the Urban Growth Area, the potential exists for noise-sensitive land uses to encroach upon existing or proposed fixed noise sources. The potential also exists for new fixed noise sources to encroach upon existing or proposed noise-sensitive land uses. Development under the Land Use Diagram will result in additional commercial, industrial, and office space, as outlined in Chapter 2.

All land uses designated General Commercial, Business Park, Industrial and Community Facility would be considered to potentially have noise sources which may exceed acceptable standards. It is not possible at this time to determine noise impacts associated with these land use designations. Therefore, a review of potential noise impacts should be conducted for these types of facilities when they are proposed.

Development under the Land Use Diagram is expected to result in the potential for additional land use noise compatibility conflicts between stationary noise sources and noise-sensitive land uses.

Aircraft Noise

Development under the Land Use Diagram may result in noise-sensitive land uses located within the future 60 dB CNEL contour for Modesto City-County Airport.

Future (Year 2009) 60 and 65 dB CNEL contours are shown on Figure 8-3 Based upon this figure, the 60 dB CNEL contour extends to the south of Hatch Road, and east of Mitchell Road. Currently, it is not known if expansion of the Modesto City-County Airport by the year 2015 will

extend the 60 and 65 dB CNEL airport noise contours, and increase the area within the Ceres Planning Area which may be affected by aircraft noise.

GENERAL PLAN POLICY RESPONSE

This section describes how the policies of the Land Use Diagram would address noise impacts associated with growth under the General Plan.

Noise

7.I.1. The City shall prohibit new development of noise-sensitive uses where the interior noise level due to non-transportation noise sources will exceed the noise level standards of Table 7-1 of the Policy Document as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 7-1 of the Policy Document.

7.I.2. The City shall require that noise created by new proposed non-transportation sources be mitigated so as not to exceed the noise level standards of Table 7-1 of the Policy Document as measured immediately within the property line of lands designated for noise-sensitive uses.

TABLE 7-1 (from Policy Document)

NOISE LEVEL PERFORMANCE STANDARDS

New Projects Affected by or Including
Non-transportation Sources

Noise Level Descriptor	Daytime	
(7 a.m. to 10 p.m.)	Nighttime	
(10 p.m. to 7 a.m.)		
Hourly Leq, dB	55	45
Maximum level, dB	75	65

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

7.I.3. The City shall not subject existing dwellings and new single-family dwellings to the standards presented in Table 7-1 of the Policy Document if feasible mitigation measures are not available to meet the requirements in Table 7-1. As a consequence, such dwellings may be located in areas where noise levels exceed the standards and it shall not be the responsibility of City to ensure that such dwellings meet the standards of this section of the General Plan or the noise standards imposed by lending agencies such as HUD, FHA and Cal Vet. The City shall, however, require notification of homebuyers of the noise levels in these areas. If homes are located and constructed in accordance with these policies and standards, it is expected that the

resulting exterior and interior noise levels will conform to the HUD/FHA/Cal Vet noise standards.

7.I.4. Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 7-1 of the Policy Document at existing or planned noise-sensitive uses, the City shall require an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design. The acoustical analysis shall meet the following requirements:

- a. It shall be the financial responsibility of the applicant.
- b. It shall be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
- c. It shall include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- d. It shall include estimates of existing and projected cumulative (20 years) noise levels in terms of Ldn or CNEL and/or the standards of Table 7-1 of the Policy Document, and compare those levels to the adopted policies of the General Plan.
- e. It shall recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the noise section of the General Plan, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
- f. It shall include estimates of noise exposure after the prescribed mitigation measures have been implemented.
- g. It shall describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

7.I.5. The City shall evaluate the general feasibility of proposed projects with respect to existing and future transportation noise levels shown in Figure 7-2 of the Policy Document.

7.I.6. The City shall prohibit new development of noise-sensitive land uses in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 7-2 of the Policy Document, unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 7-2 of the Policy Document.

TABLE 7-2 (from Policy Document)

MAXIMUM ALLOWABLE NOISE EXPOSURE

Transportation Noise Sources

Land Use Outdoor Activity Areas¹

Ldn/CNEL, dB Interior Spaces

 Ldn/

CNEL,dB Leq, dB²

Residential	603	45	--
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Transient Lodging	603	45	--	
Hospitals, Nursing Homes	603	45	--	
Theaters, Auditoriums, Music Halls	--	--	--	35
Churches, Meeting Halls	603	--	40	
Office Buildings	--	--	45	
Schools, Libraries, Museums	--	--	45	
Playgrounds, Neighborhood Parks	70	--	--	

1 Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB Ldn shall be applied at the building facade, in addition to a 60 dB Ldn criterion at the outdoor activity area.

2 As determined for a typical worst-case hour during periods of use.

3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

7.I.7. The noise created by new transportation noise sources shall be mitigated so as not to exceed the levels specified in Table 7-2 of the Policy Document at outdoor activity areas or interior spaces of existing noise-sensitive land uses.

7.I.8. New roadway improvement projects will be needed to accommodate development permitted according to the Land Use Diagram. As a result, existing noise-sensitive uses may be exposed to increased noise levels due to increased roadway capacity and increases in travel speeds, making it impractical to achieve the noise level standards contained Table 7-2 of the Policy Document. As an alternative to the standards in Table 7-2 of the Policy Document, the City will apply the following criteria to determine the significance of increases in noise related to improvement projects:

a. Where existing traffic noise levels are less than 60 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +5 dB Ldn increase in noise levels due to a roadway improvement project will be considered significant; and

b. Where existing traffic noise levels range between 60 and 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +3 dB Ldn increase in noise levels due to a roadway improvement project will be considered significant; and

c. Where existing traffic noise levels are greater than 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB Ldn increase in noise levels due to a roadway improvement project will be considered significant.

7.J.1. Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 7-2 of the Policy Document or the performance standards of Table 7-1 of the Policy Document, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

7.J.2. Where noise mitigation measures are required to achieve the standards of Tables 7-1 and 7-2 of the Policy Document, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

IMPACTS

The noise impact due to roadway and railroad traffic and industrial and fixed noise sources upon new noise-sensitive land uses, could be reduced to a less than significant level by the policies in the Policy Document.

There is potential for existing noise-sensitive uses which currently are not exposed to unacceptable traffic noise levels to experience increased traffic noise levels, in excess of General Plan standards, due to development under the General Plan.

It is also anticipated that roadway improvement projects will be required to accommodate development under the General Plan. Existing uses may be exposed to increased noise levels associated with roadway improvement projects as a result of increased roadway capacity and increases in travel speeds. It may not be practical to reduce traffic noise levels due to roadway improvement projects to a less-than-significant level.

MITIGATION MEASURES

The only mitigation measures available to reduce the impacts of increased noise levels on existing noise-sensitive uses would be to retrofit existing noise sensitive uses with noise-reducing devices (e.g., soundwalls, double-paned windows). The extent to which such retrofits could reduce noise levels is unknown, and funding sources for such retrofits are unknown. This mitigation is probably not practical on a large-scale basis, but could be used selectively in specific instances.

The first step in the process of developing a business plan is to conduct a thorough market analysis. This involves identifying the target market, understanding their needs and preferences, and assessing the competitive landscape. A detailed market analysis provides valuable insights into the potential size and growth of the market, as well as the key factors that influence consumer behavior. Once the market has been analyzed, the next step is to define the business's mission and vision. The mission statement should clearly articulate the company's purpose and the value it aims to deliver to its customers. The vision statement, on the other hand, should paint a picture of the company's long-term aspirations and the impact it wants to have on the industry. These statements serve as a guiding light for the business, helping to align all strategic decisions and initiatives.

Following the mission and vision statements, the business plan should outline the specific products or services the company will offer. This section should describe the unique value proposition of the business, highlighting the features and benefits that set it apart from its competitors. It should also detail the production process, including the sourcing of raw materials, the manufacturing process, and the distribution channels. A thorough understanding of the production process is essential for determining the costs of goods sold and for developing an effective pricing strategy.

The business plan should also include a detailed financial forecast. This involves projecting the company's revenue, expenses, and profits over a period of three to five years. To develop an accurate financial forecast, the business owner must make realistic assumptions about market conditions, sales volume, and operating costs. The financial forecast provides a clear picture of the company's financial health and helps to identify potential areas of concern, such as cash flow shortages or excessive debt levels. It also serves as a tool for securing financing, as lenders and investors will want to see a well-defined financial plan before committing funds.

In addition to the financial forecast, the business plan should address the human resources needs of the business. This includes identifying the key positions that need to be filled, the qualifications and experience required for each position, and the strategies for recruiting and retaining top talent. A strong human resources plan is crucial for the success of the business, as it ensures that the company has the right people in the right places at the right time. It also helps to establish a clear career path for employees, which can improve morale and productivity.

Finally, the business plan should outline the marketing and sales strategies that the company will use to promote its products or services and generate revenue. The marketing strategy should focus on building brand awareness, reaching the target market, and creating a strong relationship with customers. This may involve a combination of traditional marketing techniques, such as print advertising and direct mail, as well as digital marketing strategies, such as search engine optimization and social media marketing. The sales strategy should describe the sales process, from prospecting and lead generation to closing the sale and providing excellent customer service. A well-defined marketing and sales strategy is essential for the success of the business, as it ensures that the company is effectively reaching and serving its target market.

CHAPTER 9

ALTERNATIVES AND OTHER MANDATORY CEQA SECTIONS

9.1 INTRODUCTION

This chapter of the EIR addresses several topics that the CEQA Guidelines specifically requires be discussed in all EIRs. These are alternatives, significant irreversible effects, growth-inducing impacts, cumulative impacts, and mitigation monitoring. The Guidelines indicates a preference that these subjects be discussed in separate sections or paragraphs, but allows for the inclusion of a table showing where each of the subjects is discussed within the EIR. This chapter combines the two approaches, with separate discussions of each mandatory topic and references to appropriate sections elsewhere in the EIR for elaboration on the discussion included here.

9.2 REQUIREMENTS FOR ALTERNATIVES

The following paragraphs discuss the requirement of State law that EIRs include descriptions of the alternatives to a proposed project that have been considered. The first section describes the general requirements of CEQA and the second section summarizes the directions of the California General Plan Guidelines with respect to the consideration of alternatives in general plan projects.

CEQA GUIDELINES

According to the CEQA Guidelines, an EIR must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (§15126) Following are the directions that the CEQA Guidelines provide regarding the discussion of alternatives within an EIR.

(1) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code §21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

(2) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record.

(3) Evaluation of alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effect of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (County of Inyo v. City of Los Angeles, 124 Cal. App.3d).

(4) "No project" alternative. The specific alternative of "no project" shall also be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

(5) Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant impacts of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

GENERAL PLAN GUIDELINES

The General Plan Guidelines further elaborate on CEQA's requirements as they pertain to the preparation of general plans, stating as follows:

For any set of goals and objectives, there will be a number of possible courses of action a community may pursue. Alternative plan proposals should be developed and tested at this stage to enable a community to examine its possible planning scenarios. Besides the goals and objectives, the varying plans should consist of alternative sets of principles, policies, standards and plan proposals.

The nature and detail of the alternatives will depend upon the extent of the planning program. For new general plans and comprehensive general plan revisions, the alternatives will often focus on population levels and on the scale, location, and type of development. The alternatives in a more limited planning program, such as for a single element, will deal with a narrower range of options. To the extent possible, the alternatives should be developed with implementation measures in mind. This will ensure the feasibility of the basic policies.

The alternatives need not be mutually exclusive. Ultimately, the decision makers may select an amalgamation of two or more alternatives as the best choice.

9.3 SELECTION OF GENERAL PLAN ALTERNATIVES

As a practical matter, because of the comprehensive nature of the general plan, the policy and program alternatives that could conceivably be combined with these land use alternatives are infinite. For most policies in the plan, there is at least one alternative, and for many, if not most, individual parcels of land, there is at least one feasible alternative land use designation. The evaluation of the impacts of all these alternatives and their many combinations is simply not feasible or useful. For purposes of satisfying the spirit of CEQA's requirement to address alternatives, this EIR identifies feasible alternatives, focusing on land use alternatives for those areas where the General Plan proposes major changes in planned land use and in those areas where the General Plan has been identified as having the greatest environmental impact.

As part of the General Plan Update process, the City of Ceres prepared and considered a General Plan Opportunities, Constraints, and Options Report. This report identified the most critical issues to be addressed in the General Plan. This report is divided into four chapters. Chapter 1 addresses major citywide growth and development issues, including the future amount, location, and rate of growth; location and types of commercial, industrial, and residential development; agricultural lands; open space; and the pattern of future development.

Chapter 2 focuses on strategic geographic areas and specific programmatic issues, posing options and describing how they might be treated in Ceres' new General Plan. Chapter 3 looks at critical transportation issues that need to be addressed in the new General Plan. Chapter 4 addresses public facilities and services, focusing on levels of service and future implications for maintaining desired service levels. Each chapter discusses several issues, poses options for addressing each issue, and evaluated the implications of the various options in qualitative terms.

Based on this public review and comment on this report, and review and recommendations by the General Plan Review Committee and Planning Commission, the City Council provided direction on the preferred alternative for the Draft General Plan.

Other alternatives examined in this chapter are derived from the larger issues discussed in the Opportunities, Constraints, and Options Report, namely the overall urban growth area and the total population holding capacity, in addition to the "no project" alternatives required to be addressed under state law.

1. No Project—No Development Alternative. This alternative assumes no new development in Ceres beyond what is currently built, essentially placing a moratorium on any future development with no new additional annexations. This alternative would allow for no new population or employment growth. This alternative responds to the findings of *Dusek v. Anaheim Redevelopment Agency* (4th Dist. 1986) 173 Cal. App. 3d 1029, 1043 [Cal.Rptr.346]. In that case, the Courts stated that "[a] 'no project' alternative must describe maintenance of the existing environment as a basis for comparison of the suggested alternatives to the status quo." As a practical matter, the City it would be extremely difficult for the City to legally prohibit all infill development within the city limits and the City has only limited control over lands outside its city limits but within its sphere of influence.

2. No Project—Existing General Plan Alternative. This alternative assumes the City would not adopt a new General Plan and would continue to rely on the existing General Plan. This would allow development within the existing sphere of influence, defined as Crows Landing Road on the west, Faith Home Road on the east, and the TID Lateral on the south. This would have a lower population and employment growth than under the Draft General Plan. Reliance on the existing General Plan, however, would result in piecemeal General Plan amendments and EIRs, rather than comprehensively addressing potential future development. This process could make planning and financing infrastructure and other facilities and services more difficult.

3 Phase 1 of Urban Growth Area Alternative. This alternative assumes the land use designations of the Land Use Diagram within Phase 1 (the existing sphere of influence), and would include Phase 2 in “Reserve” designations. Accordingly, this would have a lower population and employment growth than under the Draft General Plan, but could necessitate future General Plan updates or amendments sooner than would be expected under the Draft General Plan.

4 Eastern Growth Alternative. This alternative assumes the City would limit future development on the west at the current city limits and would allow growth further to the east to accommodate projected population and employment growth. This alternative would accommodate essentially the same population and employment in a different land use configuration.

5. Western Growth Alternative. This alternative assumes the City would limit future development on the east at the current city limits and would grow further to the west to accommodate projected population and employment growth. This alternative would accommodate essentially the same population and employment in a different land use configuration.

6. Full Development of the Planning Area by 2015. This alternative assumes the City would provide for development of all land within the Urban Growth Area and the Reserve Areas by 2015, providing for potentially higher population and employment growth than under the Draft General Plan.

9.4 EVALUATION OF ALTERNATIVES

This EIR examines six alternatives in addition to the “preferred alternative,” which is the Draft Land Use Diagram and Draft Policy Document assessed throughout this EIR.

NO PROJECT—NO DEVELOPMENT ALTERNATIVE

The No Project—No Development Alternative assumes that no new development would be allowed beyond what currently exists (as required by *Dusek v. Anaheim Redevelopment Agency* as discussed previously). No further annexations to the city would take place, and population would remain at its current level of approximately 30,000. Selection of this alternative would essentially require that the City enact a moratorium on all new development, including projects that have already been approved. This would result in no new population or employment in the

city. Throughout this EIR, the preferred alternative (Draft Land Use Diagram) is compared with existing conditions.

The No Project—No Development Alternative would make no changes to the existing development pattern, and would therefore not result in any environmental impacts within the city limits. This alternative would therefore be environmentally superior. This alternative, however, would not allow the City to provide for any housing or employment development or redevelopment; would be inconsistent with its policies for economic development, and would prevent the City from providing adequate opportunities for meeting its regional fair share housing responsibilities. By law, communities that enact limitations on housing production are required to analyze the regional impacts on housing. This alternative would have significant impacts on other jurisdictions in the county and region to accommodate housing demand that is projected for Ceres.

This alternative, while limiting growth within Ceres, would not prevent growth from occurring in and around the Planning Area under the jurisdiction of other agencies, potentially resulting in many of the same impacts without the ability of the City to control these impacts. It should be noted, however, that these areas are currently designated primarily for agricultural uses, and would require General Plan amendments and environmental review before any other agencies could approve such new development.

NO PROJECT—EXISTING GENERAL PLAN ALTERNATIVE

The No Project—Existing General Plan Alternative would mean continued reliance on the existing Ceres General Plan, with its various elements adopted over the last 20 years, since this plan would continue to govern land use in Ceres if the new General Plan is not adopted. The existing sphere of influence reflects the Planned Urban area line for the existing General Plan, encompasses approximately 6,300 acres; this corresponds to Phase 1 of the Urban Growth Area of the preferred alternative. The existing General Plan could accommodate an additional 35,000 population with a time frame of the year 2010.

The existing General Plan generally provides for less development than the Draft General Plan, and as would be expected, would have fewer associated impacts. It would still, however, result in the conversion of prime agricultural land and would have a potentially significant impact on the groundwater basin, although to a lesser extent than the preferred alternative. Although less than the preferred alternative, unacceptable roadway conditions would occur along Hatch Road, Mitchell Road, Whitmore, and Service Roads. It would be environmentally superior to the Draft General Plan (preferred alternative), but to a lesser extent than the No Project—No Development Alternative.

The existing General Plan would fail to meet many of the objectives of the updated General Plan, however, including the promotion of employment development on the west to take advantage of the County social services center. It is likely that development around this area would still take place under County or Modesto jurisdiction; resulting in the same or worse impacts than projected under the preferred alternative, but without the City having jurisdictional control over it.

In addition, the existing General Plan is also very conceptual in nature and is more difficult to interpret and implement. The City would continue to be faced with piecemeal General Plan amendment requests and annexations, without a more comprehensive framework for addressing provision of public facilities and environmental mitigation.

PHASE 1 URBAN GROWTH AREA ALTERNATIVE

This alternative would be a variation of the preferred alternative, with primary land use designations in the Phase 1 area, but would place the remaining land within Phase 2 into Reserve designations. This would cover the same territory as the No Project—Existing General Plan Alternative, but with a more comprehensive set of planning policies and a more specific Land Use Diagram.

This would provide for less development than the Draft General Plan, and as would be expected, would have fewer associated impacts, although the time frame for its development would be shorter, and subsequent General Plan revisions to include additional land might be expected. It would still, however, result in the conversion of prime agricultural land and would have a potentially significant impact on the groundwater basin, although to a lesser extent than the preferred alternative. Although less than the preferred alternative, unacceptable roadway conditions would occur along Hatch Road, Mitchell Road, Whitmore, and Service Roads. It would be environmentally superior to the Draft General Plan (preferred alternative), but to a lesser extent than the No Project—No Development Alternative.

EASTERN GROWTH ALTERNATIVE

Under this option, the City would extend no further west than the current easternmost city limits, and would accommodate future growth primarily to the east to Washington Road. This alternative would have a similar population holding capacity to the preferred alternative (Draft Land Use Diagram).

Development east of Faith Home Road would facilitate development of the Faith Home Road expressway, since development on both sides of Faith Home Road could be required to contribute to the financing of its development. The expressway would serve, however, somewhat as a barrier between easternmost and central part of the Planning Area if it is developed as a true expressway with limited access.

This alternative would also create a wider population band around Mitchell Road area, which could increase marketability of commercial development along Mitchell Road but would also result in unacceptable traffic conditions along Mitchell Road because of its central location, probably to a greater extent than under the preferred alternative. Traffic conditions along Hatch, Whitmore, and Service Roads would also be worse than under the preferred alternative. Growth east would also require significant wastewater pipeline improvements to serve this area, since the easternmost edge would be located three miles from the treatment plant.

Development east would convert agricultural lands to urban uses, would deplete the groundwater supply, and would have regional air quality impacts at similar levels to the preferred alternative.

In addition, as with the No Project—Existing General Plan Alternative, it is likely that development around the County social services center on Crows Landing Road could still take place, resulting in additional impacts on Ceres.

WESTERN GROWTH ALTERNATIVE

Under this option, the City would extend no further west than Boothe Road where the current westernmost part of the city limits is located, and would accommodate future growth primarily to the east to Ustick Road. This alternative would have a similar population holding capacity to the preferred alternative (Draft Land Use Diagram).

This would provide the opportunity to capture more of the likely commercial and office development that would occur to support the County's jail and social services center. It would reduce the impacts on Hatch, Whitmore, and Service Roads east of SR 99 compared with the preferred alternative. It would also reduce the impacts on Mitchell Road, assuming the Faith Home expressway would be built. It would be more difficult for Ceres to participate in the development of the Faith Home expressway, however, since this would be outside Ceres' urban growth area and the opposite direction to its growth.

This alternative would result in worsened roadway conditions on Crows Landing Road to unacceptable levels because of its centralized location, and would create unacceptable conditions along Hatch, Whitmore, and Service Roads west of SR 99.

Development west would convert agricultural lands to urban uses, would deplete the groundwater supply, and would have regional air quality impacts at similar levels to the preferred alternative.

FULL DEVELOPMENT OF THE PLANNING AREA ALTERNATIVE

Under this alternative, the areas designated for Residential and Industrial Reserve under the Draft General Plan would be designated for future urban development, in addition to those lands within the Urban Growth Area. This alternative would encompass approximately 14,000 acres, with a population holding capacity of 106,000. As would be expected, the impacts of this alternative would be greater than the preferred alternative in every area, including conversion of agricultural lands, depletion of the groundwater supply, degradation of regional air quality, and worsened traffic levels of service on all the major arterials.

This alternative would also fail to meet many of the objectives of the General Plan for retaining the City's character and managing growth at a reasonable pace.

9.5 SIGNIFICANT IRREVERSIBLE EFFECTS

CEQA requires that EIRs describe any significant irreversible environmental changes which would be involved in the proposed action should it be implemented.

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as roadway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with new development that would be permitted under the Draft General Plan. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Conversion of prime agricultural soils is considered an irreversible environmental changes of the Draft General Plan.

9.6 GROWTH-INDUCING IMPACTS

CEQA requires that EIRs address the growth-inducing impact of the proposed action. The CEQA Guidelines require that EIRs discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities so consideration must be given to this impact. The Guidelines also call for EIRs to discuss the characteristic of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Arguably, any general plan that designates undeveloped land for future development can be defined as "growth-inducing." Since one of Ceres' objectives in updating its General Plan is the promotion of economic development and accommodation of demand for residential growth, this is the case with the Draft General Plan, particularly in respect to areas designated for new development. In promoting such development and accommodating such growth, the Draft General Plan, however, attempts to address the potentially adverse implications through policies, programs, and proposals for adequate infrastructure, promotion of a reasonable balance between jobs and housing, and protection of environmentally-sensitive resources.

9.7 CUMULATIVE IMPACTS

The CEQA Guidelines require a discussion of the potential cumulative impacts that could result from a proposed project in conjunction with other projects in the vicinity. Cumulative impacts occur when two or more individual effects together create a significant environmental impact, or if they compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place simultaneously or over time.

As a practical matter, an EIR on a comprehensive general plan is an assessment of the cumulative impacts of development within the area covered by the plan. The impact analyses contained in this EIR are, in effect, cumulative analyses because they examine the cumulative effects of growth over the next 20 years in Ceres. On a large cumulative scale, the traffic section (and, by association, air quality and noise) takes into account regional effects. The Draft General Plan sets out policies and programs to address the potentially adverse cumulative effects of new development.

The cumulative land use analysis focuses on the buildout of the Draft General Plan, including the development of all commercially and industrially designated land within the Urban Growth Area. The following describes cumulative impacts addressed in each of the topical chapters of this EIR.

LAND USE AND AGRICULTURAL RESOURCES

The cumulative land use analysis focuses on proposed development in and around Stanislaus County. Cumulative impacts related to land use include the general intensification of land uses in the region. Major areas of proposed growth in the region include the Modesto, Riverbank, and Turlock areas, in connection with substantial growth projected throughout the San Joaquin Valley and along the SR 99 corridor. Development of these areas would result in the conversion of agricultural land to urban uses. Conversion of 3,700 acres of agricultural land in Ceres will contribute to the overall conversion of farmland occurring throughout Stanislaus County and in neighboring counties. Urban and suburban development in the San Joaquin Valley will continue to result in the conversion of the state's most valuable farmland and loss of production from these farmlands. Loss of production from these lands will have an adverse effect on the overall agricultural economy.

TRAFFIC

The cumulative impact analysis is implicit in Chapter 4 of this EIR. The traffic model used for this analysis is consistent with the traffic model used by the Stanislaus Area Association of Governments (SAAG) to analyze forecasted growth throughout the county.

WATER SUPPLY

The cumulative analysis of water supply considers the region's groundwater basin. Accommodation of projected growth in communities relying on groundwater supply as a municipal water source along with continuing agricultural use of water in the basin will continue to deplete groundwater supplies. This is a potentially significant cumulative impact of continued growth. Water conservation measures for both municipal and agricultural uses, exploration of surface water supplies, recharge of the groundwater basin, and participation in a basinwide management plan could serve to reduce the depletion of the groundwater.

AIR QUALITY

The cumulative impact analysis for air quality is contained in the air quality section of Chapter 7, Agricultural and Natural Resources. The traffic volumes upon which the air quality analysis is based are described in Chapter 4, Transportation, and are cumulative in nature, as described previously.

Development under the Draft General Plan is part of a continuing pattern of urbanization in the San Joaquin Valley Air Basin. The overall cumulative effect of new development throughout the air basin will slow the rate of improvement and/or require enactment of more stringent control measures throughout the basin.

GEOLOGIC HAZARDS

Accommodating projected growth in Ceres combined with development in surrounding communities would expose a large number of people and structures to seismic shaking and associated seismic risks such as inundation from ruptured dams. In the event of a large earthquake affecting the region, emergency services within each jurisdiction would be stressed.

NOISE

The cumulative noise assessment is contained in the noise section of Chapter 9, Health and Safety. The analysis focuses on noise sources along all the major corridors.

9.8 MITIGATION MONITORING

CEQA prohibits a public agency from approving or carrying out a project for which an environmental impact report identifies significant environmental effects, unless one of specified findings relative to mitigation of those effects has been made. Section 21081.6 of the State of California's Public Resources Code states that when an agency approves a project subject to implementing mitigation measures (in an EIR or Negative Declaration), the public agency must adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.

The policies and programs of the Draft Policy Document operate to mitigate most of the impacts of new development under the Draft Plan. Under Implementation Program 9.1, the City must annually review the General Plan Policy Document. As stated in the program, this review shall be used to satisfy the requirements for a mitigation monitoring program.

CHAPTER 10

DRAFT GENERAL PLAN/DRAFT EIR COMMENTS AND CITY RESPONSES

INTRODUCTION

According to Section 15132 of the State CEQA Guidelines, final EIRs must contain the following information:

- (a) The draft EIR or a revision of the draft.
- (b) Comments and recommendations received on the draft EIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the draft EIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the Lead Agency. (Public Resources Code).

This chapter of the Final EIR for the City of Ceres General Plan responds to items (b), (c), and (d), while Chapters 1 through 9, which are comprehensive revisions of the same chapters from the Draft EIR, address items (a) and (e). The following paragraphs describe the City's public review process for the Draft EIR and how this Final EIR addresses the requirements of the State CEQA Guidelines for responding to comments received on the Draft EIR.

DISTRIBUTION AND REVIEW OF THE DRAFT EIR

The State CEQA Guidelines requires that agencies preparing EIRs "provide adequate time for other public agencies and members of the public to review and comment on a draft EIR." (Section 15203). While the law does not generally define what constitutes adequate time, it does specify that draft EIRs submitted to the State Clearinghouse of the Governor's Office of Planning and Research should be subjected to a review period of at least 45 days. Section 15025 of the State CEQA Guidelines requires that draft EIRs for four classes of projects be submitted to the Clearinghouse: (1) those for which a state agency is the Lead Agency; (2) those projects for which a state agency is a Responsible Agency, Trustee Agency, or otherwise has jurisdiction over the project; (3) projects of statewide, regional, or areawide significance; and (4) reports prepared pursuant to the requirements of the National Environmental Protection Act (NEPA). The Guidelines (Section 15026 (b)(1)) further defines local general plans as projects fitting into the third category above (i.e., projects of statewide, regional, or areawide significance).

In compliance with requirements described above, the City submitted copies of the Draft EIR on the City of Ceres Draft General Plan to the State Clearinghouse on April 22, 1996, thus initiating the mandatory review period. At the same time, the City distributed copies of the Draft EIR to numerous local agencies, organizations, and individuals with an interest in the General Plan Update. The State CEQA Guidelines (Section 15203 (a)) requires that the local review period for a draft EIR be consistent with applicable Clearinghouse review periods, so the City established a

review period of slightly longer than 45 days that coincided with the Clearinghouse's review period (April 22, 1996, through June 16, 1996). In response to requests by parties reviewing the EIR, the City extended the review period through June 18, 1996.

During the review period, the City received 15 written comments on the Draft EIR. In addition, it received other written and oral comments on the Draft General Plan. This document includes only those written comments that specifically address the EIR and that were submitted during the EIR comment period. Additional written comments on the Draft General Plan and minutes from public hearings on the Draft General Plan are on file at the City of Ceres Planning and Community Development Department, 2200 Magnolia Street, in Ceres.

ORGANIZATION OF THIS VOLUME OF THE FINAL EIR

This volume of the Final EIR includes a photocopy of each written comment letter submitted on the Draft EIR. Each individual comment within these comment letters and minutes is marked with a number. Following each letter is the City's response to each comment according to its number.

The comment letters and response sections are organized in the order in which the letters were dated.

No.	Agency/Organization	Signature	Date
1	Ceres Unified School District	Jack Rudd	May 20, 1996
2	Modesto City Schools	Debbe Bailey	May 28, 1996
3	City of Modesto	Bill Nichols	May 31, 1996
4	Modesto City-County Airport	Howard L. Cook, A.A.E	June 3, 1996
5	California Department of Transportation	Dana Cowell	June 4, 1996
6	Stanislaus County Department of Social Services	John Turner	June 4, 1996
7	California Department of Conservation	Jason Marshall	June 5, 1996
8	Governor's Office of Planning and Research	Antero A. Rivasplata	June 6, 1996
9	California Department of Fish and Game	Dale Mitchell	June 7, 1996
10	Stanislaus County Department of Public Works	Charles Barnes	June 10, 1996
11	Stanislaus County Airport Land Use Commission	Fran Sutton-Berardi	June 12, 1996
12	Stanislaus County Local Agency Formation Commission	Fran Sutton-Berardi	June 13, 1996
13	Stanislaus County Chief Executive Office	Richard Jantz	June 17, 1996
14	San Joaquin Valley Unified Air Pollution Control District	Joan Merchen	June 18, 1996
15	Normoyle and Newman	Dave O. Romano, P.E.	June 18, 1996

Comment Letter 1

RESPONSE TO COMMENT LETTER 1
Ceres Unified School District (May 20, 1996)

1. References changes as suggested.
2. Resolution cited in Policy 4.J.7 as requested.
3. Text amended as suggested.
4. The estimate of 300 new students in Phase 1 is the total number of students that could potentially be accommodated as new infill units based on the General Plan land use designations, using average student yield rates. It is very likely, however, that this level of infill development will not occur during the time frame of the General Plan. Within the Modesto City Schools district boundaries, only nonresidential development is designated in Phase 2. In addition, the plan designates Residential Reserve within the Modesto City Schools' boundaries; these areas are assumed to be developed beyond the time frame of this General Plan and will require separate environmental review prior to development to determine the potential impacts on schools and other services.
5. Text revised as suggested and Figure 5-5 removed. (Note: the figure was replaced with a map of the school districts' boundaries in the Planning Area)
6. See response to comment #2.

Comment Letter 2

Comment Letter 2
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Comment Letter 2
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RESPONSE TO COMMENT LETTER 2
Modesto City Schools (May 28, 1996)

1. The three documents were revised to reflect these boundaries of the Modesto City Schools Elementary and High School boundaries. In addition, a figure (Figure 5-5) was added to the Policy Document showing the school districts' boundaries in the Planning Area.
2. Where appropriate, references to Modesto City Schools, or more generic references to "school districts," were added to the policies in the schools section. The City has an established mitigation agreement with the Ceres Unified School District (CUSD) that preceded this General Plan. The EIR concludes, and the comment letter confirms, that development in the Urban Growth Area will not require the construction of new schools in the Modesto City Schools Elementary or High School districts, but will contribute to the cumulative need for additional space in existing schools. To address this issue, Policy 4.J.7 was revised to add the intent to negotiate with Modesto City Schools to determine appropriate mitigation for the impacts of new development on Modesto City Schools.
3. The Background Report has been modified to include this information.
4. Text was revised to add this information.
5. The two policies were revised to refer to "school districts."
6. Text was revised as suggested.
7. The policies were revised to refer to "school districts."
8. The reference was corrected on the Land Use Diagram.
9. The numbers should be 100s. The map will be revised.
10. Text will be revised to add this information.
11. Text will be revised as suggested.
12. Text will be revised as suggested.
13. Text will be revised as suggested.
14. See response to comment #5.
15. See response to comment #7.
16. The text of the EIR will be revised to indicate that potential new development will require additional classrooms to avoid overcrowding at Modesto City Schools. Since new

schools will not be required, and since most of this area is a developed area that is not within Ceres' current city limits, the appropriate mitigation mechanism requires additional analysis and negotiation among the affected parties.

17. The EIR concludes that the impact is less-than-significant, and therefore, no additional mitigation measures beyond the policies and programs of the General Plan are necessary.

Comment Letter 3

Comment Letter 3
Continued

RESPONSE TO COMMENT LETTER 3

City of Modesto Community Development Department (May 31, 1996)

1. The shading in Figure 1-4 (renumbered as Figure 1-5) was intended to illustrate the envelopes of the three different areas within the Regional Commercial Area. Shading over roadways was not intended to indicate that these roadways would be closed. The figure was revised to eliminate this possible confusion.
2. Comment noted. Airport Manager sent in a separate comment letter.
3. The policy was not intended to be combative, but to reflect the City's longstanding position that any future expansion of Modesto be limited so as not to encompass Ceres or limit Ceres' future growth options and desire for community separation. The City is pleased that Modesto's recently adopted General Plan did not extend its boundary south of Whitmore.
4. Although it would be preferable to have a Class I bikeway on this road, there is not adequate right-of-way to accommodate it. The City will consider safety issues when developing this roadway and bikeway.
5. The drainage issues reflect current planning in updating the City of Ceres' storm drainage master plan. Various alternatives were explored at that stage, and detention basins were selected as the most feasible alternative.
6. Policy 5.A.7 was revised to reflect the intent to explore such partnerships.
7. Policy 5.A.7 was revised to reflect the intent to explore such partnerships.
8. The entire park area would not necessarily be used as a detention pond, so there would likely be available space in parks that would not be flooded. These are operational issues that will be addressed in park development.
9. Although a desirable goal, as a practical matter, this option is preempted by private ownership and existing development along the river corridor within the Ceres Urban Growth Area.

Comment Letter 4

Comment Letter 4
Attachment

RESPONSE TO COMMENT LETTER 4
Modesto City - County Airport (June 3, 1996)

1. The land use designations were modified to Very Low Density Residential to reduce densities.
2. The land use was redesignated for Very Low Density Residential.
3. A new section with the City's standards was added to Chapter 1 of the Policy Document. These standards (as stated in Table 1-2) provide for density transfers away from the centerlines (Outer Safety Zone).

Comment Letter 5

Comment Letter 5
Continued

Comment Letter 5
Continued

Comment Letter 5
Continued

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RESPONSE TO COMMENT 5

California Department of Transportation (June 4, 1996)

The comments raised in this letter addressed both technical concerns related to the traffic modeling and issues related to funding of regional facilities. Because of the regional nature of these concerns, City staff and the City's traffic consultants (Dowling Associates) met with representatives from Caltrans on June 17, 1996, to discuss their concerns and the most appropriate way to address them.

The comments by Caltrans were responded to in a letter to Mr. Cowell from Dowling Associates, consultant to the City of Ceres, in a letter dated June 18, 1996 (attached). All technical data was provided directly to Caltrans to address their concerns. The following paragraphs summarize the remaining comments and the response to issues related to funding of regional traffic facilities. This responses are therefore not numbered by individual comment as in the other letters.

Note that the assumptions for future land use by type are included in Chapter 2 of the EIR.

Caltrans' primary interest was expressed as concern regarding the interchanges of the SR 99 freeway at Crows Landing Road, Hatch Road, Whitmore Avenue, Pine Street, Service Road and Mitchell Road. Caltrans also expressed interest in having the City of Ceres fund some portion of the costs of providing additional capacity to SR 99 through lanes. Caltrans asked on Page 2 of their letter that new development be assessed fees to support the Route 99 improvements. They noted on Page 4 that there is no financing mechanism in place for a SR 99 widening project, even though the modeling process indicated a need for such a product by the end of the planning horizon for the General Plan.

The City includes improvement costs of the interchanges into its development fee process; however, since it is quite early in the planning process, specific designs for all interchange improvements have not been made, and as a result, cost estimates have not been made, in particular for the Mitchell/Service interchange. Thus it is premature to present a clearly defined financial program for all interchange improvements; the City does agree in principal with the concept of interchange improvements being at least partially funded from City-derived sources. Policy 1.K.1 supports improvements to the Mitchell Road interchange; the funding will be determined in connection with the master plan for this area.

With regard to City contributions to the cost of improvements to the SR 99 mainline, the City has determined that it is significantly premature to commit to such a process. There are a number of issues to deal with prior to making such a commitment. First, it appears that the City of Ceres may be the first city in the county to submit its General Plan update to the Congestion Management Plan (CMP) conformance process. Modesto's recent update, which would have significantly greater impacts on SR 99, apparently did not go through this process. The City of Ceres believes that all parties contributing to future growth in traffic along SR 99 should be involved in the process, and that the data base used by SAAG as the basis of analysis should contain the most recent thinking in terms of both land use and transportation support from all contributing agencies.

Secondly, there is a technical question which requires resolution. The City believes that additional refinement may be needed to the SAAG land use data base for both the short and long-term scenarios. Traditionally, cities have tended to overestimate the amount of non-residential land use that is included in the build-out of their General Plan. If one city is significantly higher in their estimate of non-residential land than other cities (i.e., if Modesto contains a significantly greater percentage of excess nonresidential land than Ceres), these imbalances can tend to distort the trip distribution patterns within the county. If, as may be possible, there is an excess of industrial land proposed for the western portion of Modesto, this could be artificially increasing the demand along SR 99 from Ceres. In the view of the City of Ceres, additional technical work is needed to assure that the short and long range land-use scenarios, as translated into travel model inputs, are logical and reasonable.

Third, the City of Ceres is not convinced—as a matter of policy—that improvements to the main line of SR 99 should be financed from locally-generated sources. The state highway system was originally intended to be as described: a State of California system. While revenues have declined at the state level, they are not necessarily more plentiful at the local level. Further, the nature of these facilities is that they serve sub-regional, regional, intra-state and inter-state traffic to a much larger extent than they serve local traffic, particularly in Ceres where there are few interchanges. Funding of the state highway system at the state level appears to be a logical match between the source of the "problem" and the appropriate source of the financing to solve the problem. The City believes that further discussion with all parties is needed to determine the most appropriate funding source or sources.

The likely timing of an SR 99 improvement project is somewhat speculative at this point. Travel forecasting in support of the General Plan indicated that if it is needed at all, it would likely be needed near the end of the planning horizon of this General Plan (2015). It is likely that this General Plan would be updated again within 10 years, which would be much closer to the time when more detailed planning, costing and design would occur. It is the City's position that little can be lost in deferring both design and funding considerations until the next update of the General Plan or until further resolution of regional needs.

Finally, improvements to the mainline will be large, costly projects requiring the marshaling of funds much larger than could reasonably be expected to be gathered from local sources such as development fees. Since development proceeds on a cyclical basis, there is no assurance that when a particular freeway improvement project is ready for implementation, that the development necessary to support some level of funding will have occurred. For all of these reasons, the City will work with SAAG and other affected agencies, including Caltrans, on the planning, identification of appropriate funding mechanisms and implementation of potential improvements.

While the City believes that for the reasons stated above that it is not appropriate to commit to funding at this time, Policy 2.A.9 and Program 2.3 were added to the Policy Document to assure that adequate planning steps are undertaken to address both the long-term improvements needed on SR 99 and the short term needs associated with the CMP analysis.

Response to Comment 5
Attachment

Response to Comment 5 Attachment

Response to Comment 5
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Response to Comment 5
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Response to Comment 5
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Response to Comment 5
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Response to Comment 5
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Comment Letter 6
Continued

1. The Commission's proposed rule regarding the treatment of certain types of transactions is not consistent with the Commission's long-standing policy of treating all transactions equally.

2. The Commission's proposed rule regarding the treatment of certain types of transactions is not consistent with the Commission's long-standing policy of treating all transactions equally.

3. The Commission's proposed rule regarding the treatment of certain types of transactions is not consistent with the Commission's long-standing policy of treating all transactions equally.

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7. The Commission's proposed rule regarding the treatment of certain types of transactions is not consistent with the Commission's long-standing policy of treating all transactions equally.

8. The Commission's proposed rule regarding the treatment of certain types of transactions is not consistent with the Commission's long-standing policy of treating all transactions equally.

RESPONSE TO COMMENT 6

Stanislaus County Department of Social Services (June 4, 1996)

1. Financial effects on the services provided by the County Department of Social Services are not physical impacts. The State CEQA Guidelines address economic and social effects as follows:

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

The term "significant effect on the environment" is defined in Section 21068 of CEQA as meaning "a substantial or potentially substantial adverse change in the environment." This focus on physical changes is further reinforced by Sections 21100 and 21151.

. . . Effects on facilities or services are not automatically regarded as significant effects of a project. The changes must be related to or caused by physical changes. If the project causes a direct physical change in a facility by pumping ground water and causing ground settling under the facility, the resulting deterioration can be easily regarded as a significant effect. If the project causes physical changes that affect the use of the facility, the effects on use may be considered a significant effect in the same way as increases in traffic are often treated as significant effects.

Effects on the County Department of Social Services would therefore not be considered a significant impact for the purposes of CEQA. The following additional responses elaborate on this.

2. The General Plan would accommodate projected population growth, consistent with countywide population projections. Presumably, if Ceres failed to accommodate its share of population growth, this growth would be accommodated elsewhere in the county. The City continues to collect the County's development fees to fund County capital facilities.

3. The General Plan, and the adopted Housing Element, provide for a range of housing types and provision of moderate, low, and very-low income housing. In addition, the City's redevelopment activities also address rehabilitation and provision of housing.

4. Existing and additional employment and service activity at the County Social Services Center, along with development of the land uses designated around the area, was programmed into the City's traffic model, and no significant effects on traffic were identified. In addition, the City requires on-site parking for new development, and presumably, the County will require adequate parking with expansion of its facilities. Increased development along Crows Landing and Service Roads, as designated in this General Plan, will make public transit service to the area more feasible than it is currently.

Comment Letter 7

Environmental Protection Agency
Washington, D.C. 20460

1. The Agency is reviewing the comments received on the proposed rule. The comments received are being reviewed and the Agency is taking them into account in the final rule.

2. The Agency is also reviewing the comments received on the proposed rule. The comments received are being reviewed and the Agency is taking them into account in the final rule.

3. The final rule will be issued in the near future. The Agency is taking the comments received into account in the final rule. The Agency is also reviewing the comments received on the proposed rule. The comments received are being reviewed and the Agency is taking them into account in the final rule.

The Agency is also reviewing the comments received on the proposed rule. The comments received are being reviewed and the Agency is taking them into account in the final rule. The Agency is also reviewing the comments received on the proposed rule. The comments received are being reviewed and the Agency is taking them into account in the final rule.

RESPONSE TO COMMENT LETTER 7

California Department of Conservation (June 5, 1996)

1. The County considers an agricultural preserve the area zoned for agricultural of 20 acres parcels or larger (A-2-20). This includes most of the territory outside the current sphere of influence. Virtually all this land is prime agricultural land.
2. The Background Report will be revised to include a map showing the location of Williamson Act lands in the Planning Area.
3. The Final EIR will be amended to describe the impacts that the project may have on lands under Williamson Act. Within Phase I (the current sphere of influence), 178 acres are in Williamson Act contract. Virtually all of these were protested by the City. Within Phase 2, approximately 700 acres of land are under Williamson Act land. Another 521 acres of land designated as Residential or Industrial Reserve is under Williamson Act contract. Approximately 850 acres of Williamson Act lands within the Planning Area are designated for Agriculture, indicating the City's intent that these retain their agricultural use.

Because of its phasing plan, the plan should not hasten nonrenewals or result in cancellations of Williamson Act lands in Phase 1, since these were already within the City's sphere of influence and have generally already filed for nonrenewal or were protested by the City. Most of the Williamson Act lands within the Urban Growth Area are in Phase 2; this may result in filing of some additional nonrenewals in anticipation of future urban development of this area, but no cancellations are projected since the phasing plan provides a longer-term warning of future urban development potential. No development of the Reserve areas is anticipated within the time frame of the General Plan (through 2015), but this area is identified as the most likely area for future growth after development of the Urban Growth Area (Phases 1 and 2). This may result in filings for nonrenewal in anticipation of ultimate urban development, but provides greater certainty and a better estimate of development time frame for owners, and may prevent nonrenewals on other areas of the periphery as speculation.

Comment Letter 8

Comment Letter 8
Continued

RESPONSE TO COMMENT LETTER 8

Governor's Office of Planning and Research (June 6, 1996)

1. This letter acknowledges compliance with State Clearinghouse review requirements and requires no response.

Comment Letter 9

RESPONSE TO COMMENT LETTER 9

California Department of Fish and Game (June 7, 1996)

This comment letter concludes that the project will have no significant impacts. Based on this comment letter and further review, the FEIR concludes that the plan will have no significant adverse impacts and no additional mitigation measures are needed.

Comment Letter 10

Comment Letter 10

Comment Letter 10

RESPONSE TO COMMENT LETTER 10

Stanislaus County Department of Public Works (June 10, 1996)

1. The City's General Plan designates roadways needed to accommodate the traffic volumes projected from development of the land uses designated on the Land Use Diagram. By law, General Plan land use and circulation plans must be correlated in this way. Further, the County General Plan includes policies and implementation measures to address such circumstances.

Stanislaus County General Plan Policy Four

A circulation system shall be developed that provides for streets in all classifications (freeway, expressway, major, collector, local, minor and private) as necessary to provide access to all parts of the County based on anticipated land use [emphasis added].

Stanislaus County General Plan Policy 24, Implementation Measure 1

All discretionary development proposals within the sphere of influence or areas of specific designation of a city shall be referred to that city to determine whether or not the proposal shall be approved and whether it meets their development standards. If development standards of the city and County conflict, the city's standards shall govern [emphasis added].

To achieve conformity between the two plans, the City added Implementation Program 1.7, encouraging the County to update its General Plan to be consistent with the City's plan.

Comment Letter 11

Page 10 of 10
Comment Letter 11

The City of Los Angeles is a large, diverse, and vibrant community. It is a city of many faces, many cultures, and many languages. It is a city that is constantly growing and changing, and it is a city that is always looking for ways to improve itself. The City of Los Angeles is a city that is proud of its diversity and its many achievements, and it is a city that is always looking for ways to make a better place for everyone.

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RESPONSE TO COMMENT LETTER 11

Stanislaus County Airport Land Use Commission (June 12, 1996)

1. The EIR acknowledges that the densities in the General Plan are not consistent with the ALUC Plan, but concludes that they provide for the protection of health and safety. Note that the densities in the area were revised based on further review and discussion with the Modesto City-County Airport Manager and consultation with the California Division of Aeronautics.
2. The language in Policy 7.F.2 was moved to Chapter 1, Land Use and Community Development, in a new section on "Airport Area Development." The policy (now Policy 1.H.3) was revised to reflect that the Airport Planning Handbook is a guideline.

Comment Letter 12

REPLY TO COMMENT LETTER 12
The following comments were received from the public in response to the public comment period for the Draft Environmental Impact Statement (EIS) for the proposed project.

1. The public comment period for the Draft EIS was held from January 15, 2014, to February 15, 2014. During this time, the public was invited to provide comments on the Draft EIS. The public comment period was held in accordance with the requirements of the National Environmental Policy Act (NEPA) and the Federal Acquisition Regulation (FAR).

2. The public comment period was held in accordance with the requirements of the National Environmental Policy Act (NEPA) and the Federal Acquisition Regulation (FAR). The public comment period was held from January 15, 2014, to February 15, 2014. During this time, the public was invited to provide comments on the Draft EIS.

Comment Letter 12
Attachment

RESPONSE TO COMMENT LETTER 12
Stanislaus County LAFCO (June 13, 1996)

1. The maps will be made more legible in the final versions.
2. The boundaries of the Urban Growth Area and boundaries of Phase 1 were revised to reflect physical or natural boundaries where such features existed.

Comment Letter 13

RESPONSE TO COMMENT LETTER 13

Stanislaus County Chief Executive Office (June 17, 1996)

See response to Stanislaus County Public Works (Comment Letter 10)

Comment Letter 14

U.S. Fish and Wildlife Service

U.S. Department of the Interior, Bureau of Land Management, Washington, D.C. 20002

1. The proposed action is to issue a permit for the construction of a new building on the site of the old building. The proposed action is to issue a permit for the construction of a new building on the site of the old building. The proposed action is to issue a permit for the construction of a new building on the site of the old building.

2. The proposed action is to issue a permit for the construction of a new building on the site of the old building. The proposed action is to issue a permit for the construction of a new building on the site of the old building. The proposed action is to issue a permit for the construction of a new building on the site of the old building.

3. The proposed action is to issue a permit for the construction of a new building on the site of the old building. The proposed action is to issue a permit for the construction of a new building on the site of the old building.

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5. The proposed action is to issue a permit for the construction of a new building on the site of the old building. The proposed action is to issue a permit for the construction of a new building on the site of the old building.

Comment Letter 14
Continued

RESPONSE TO COMMENT LETTER 14

San Joaquin Valley Unified Air Pollution Control District (June 18, 1996)

1. The requested language was added to Policy 6.F.3, with the original language left also so as to provide a general frame of reference so that users of the plan generally know when to a project will trigger the requirements of this policy. The City will also refer to the specific thresholds to be defined in the forthcoming Guide for Assessing Air Quality Impacts.
2. It seems unlikely that limiting new residences to one woodstove would "greatly" reduce health/nuisance complaints since very few homes in Ceres have more than one fireplace or woodstove. The City will continue to monitor this issue, and added language to Policy 6.F.8 to allow such limitation if necessary to ensure that residents are not using wood to heat their homes.
3. The policy was added to the Policy Document as requested (as Policy 6.F.9).
4. The table will be corrected as suggested.
5. The Background Report will be corrected as suggested.

Comment Letter 15

10/10/2019 10:10:10 AM

10/10/2019 10:10:10 AM

The first comment is that the project is not a new project, but a continuation of the existing project. The second comment is that the project is not a new project, but a continuation of the existing project. The third comment is that the project is not a new project, but a continuation of the existing project. The fourth comment is that the project is not a new project, but a continuation of the existing project. The fifth comment is that the project is not a new project, but a continuation of the existing project.

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Comment Letter 15
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RESPONSE TO COMMENT LETTER 15

Normoyle & Newman (June 18, 1996)

A-1 This is the process that will be followed for adoption of the plan. In addition, prior to adoption of the plan, it must also be reviewed by the Stanislaus County Airport Land Use Commission (ALUC) for a determination of consistency with the ALUC Plan.

A-2 The language was changed as suggested.

A-3 The language was changed as suggested.

A-4 The policy to which the commentor refers addresses land use designations throughout the Planning Area, rather than at a project level. It reflects the philosophy in this General Plan to move toward a more self-sufficient community, with more employment and commercial development. Other policies in the document (4.B.1 and 4.B.3) address the financial and fiscal issues related to specific project approval, and include language or were amended to include allowances for exceptions.

A-5 The emphasis in Policy 1.D.1 is on the development of neighborhoods with a community-oriented focal point (e.g., park or open space area, community facility) and pedestrian convenience. Many of the features found in historic neighborhoods accomplish this objective however, the policy is intended to provide for flexibility in individual developments.

A-6 This policy calls for promoting these features (not requiring) in keeping with the theme of encouraging pedestrian-friendly neighborhoods.

A-7 The General Plan expresses a commitment to the development of expressways to ensure capacity and traffic flow to move through-traffic through the city and avoid congestion. It is therefore committed to limiting access points to maximize the traffic-carrying potential of expressways. Limiting access points does not prohibit all access, and allows some flexibility while preserving the expressway function.

A-8 The language was added as suggested (Note: Policy renumbered as 1.N.2).

A-9 Fowler Road was intentionally not connected to Faith Home Road avoid through-traffic on this roadway and the negative effects of higher traffic volumes on this roadway on surrounding land uses. If some connection is identified as necessary that would avoid these negative effects, it would not be precluded by the current Circulation Diagram.

A-10 Specific right-of-way width of 100 to 158 feet was added for expressways. This would range from 100 feet four-lane road, mid-block, to 158 feet for a six-lane intersection.

A-11 Policy 2.A.6 allows for exceptions when "new development generates significant public benefits" and provides two examples. Rather than identifying all the possible circumstances that

could be identified as public benefits, this would be open to some interpretation to be determined in plan implementation.

A-12 Policy 2.B.3 was revised to indicate that right-turn in, right-turn out would be restricted for “secondary” collectors. The City’s desire to ensure the viability of the expressway system to carry traffic does make this an absolute standard.

A-13 The diagram is intended to illustrate the general concept of pedestrian walkways in cul-de-sacs. Such pathways would be implemented where needed to provide for inner connectivity. The policy was revised to indicate that such pathways would be included “where appropriate.” In addition Policy 7.E.6 (iii) was revised to remove any possible inconsistency.

A-14 This figure would not preclude this possibility, but does not mandate it. The details will be determined based on the continued areawide planning of this area.

A-15 Policy 2.F.4 addresses pathways, bikeways, and trails within new development. Policy 2.F.10 (renumbered as Policy 2.F.5) refers to citywide facilities (i.e., on streets and Class 1 bikeways), requiring new development to address its fair share of regional facilities.

A-16 See response to A-11.

A-17 Policy 4.B.3 was revised to allow for exceptions.

A-18 The underground water line can follow roadway rights-of-way, but can also have non-roadway alignments. No extension of the roadway alignment is necessary for this water system layout.

A-19 These reflect the City’s current service levels.

A-20 These reflect the City’s current service levels.

A-21 The policy was revised as suggested.

A-22 The discussion, included in the Background Report, was added to the Policy Document.

A-23 This policy (renumbered as 6.C.6) refers to supporting the management efforts of the California Department of Fish and Game, not direct actions by the City of Ceres. It is not necessary to add a disclaimer.

A-24 Policy revised as suggested.

A-25 It is assumed that the only “appropriate” mitigation measures would be those that are feasible. No change in the language is therefore needed.

A-26 Policy 7.E.6 (iii) was revised to clarify its intent.

A-27 Various state statutes require consistency of certain local actions with the General Plan. Beginning with *O'Loane v. O'Rourke* (1965) 231 Cal.App.2d774,782, the court described the general plan as a "constitution" for all future development. Pursuant to state law, all development agreements (Government Code §65867.5), capital improvements (Government Code §65401 and 65402 and *Friends of B Street v. City of Hayward* (1980) 106 Cal.App.3d 988), large-scale urban development projects (Health and Safety Code §56032), specific plans (Government Code §65454), and zoning (Government Code §65860) must be consistent with the General Plan.

The General Plan Guidelines include a general rule that "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment."

Although every policy will not come into play for every future project or General Plan amendment, future projects and General Plan amendments must not be inconsistent with any policies in the plan, consistency generally with overall intent is not sufficient.

B-1 This is included in the Background Report (Chapter 6). Note that as stated in the EIR, the Background Report serves as the environmental setting portion of the EIR.

B-2 A new section was added to Chapter 1 (new Section 1.H) of the Policy Document addressing airport area development. This section clearly sets out the City standards for development in this area and explains the source of these requirements.

B-3 Where feasible, new development should be constructed to the noise standards included in the document. In some cases (i.e., close to SR 99), however, it is not feasible to mitigate to this level. In such cases, development would be permitted, with notification to potential buyers that noise levels may exceed City standards. Policy 7.I.3 was revised to clarify this.

APPENDIX A

AIR QUALITY MODELING METHODOLOGY AND ASSUMPTIONS

A. CALINE-4 MODELING

The CALINE-4 model is a fourth-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway. Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway. The CALINE-4 model allows roadways to be broken into multiple links that can vary in traffic volume, emission rates, height, width, etc..

A screening-level form of the CALINE-4 program was used to predict concentrations. Normalized concentrations for each roadway size (2 lanes, 4 lanes, etc.) are adjusted for the two-way traffic volume and emission factor. Calculations were made for a receptor at a corner of the intersection, 25 feet equidistant from the two roadways.

Emission factors were derived from the California Air Resources Board EMFAC7-F computer program. An average vehicle speed of 10 MPH was used to represent conditions at an intersection. The calculation was based on peak traffic equivalent to 10% of the Average Daily Traffic (ADT).

The screening form of the CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The 1-hour background level in 2015 was taken as 4.4 PPM, while the 8-hour background concentration was taken as 3.4 PPM. These backgrounds were estimated by linear rollback utilizing maximum concentrations measured in 1993 at the Modesto monitoring site and multiplying by the ratio of Stanislaus County CO emissions in 2010 as calculated by the BURDEN7F program to 1993 CO emissions as calculated by BURDEN7F.

Eight-hour concentrations were obtained from the 1-hour output of the CALINE-4 model using a persistence factor of 0.7.

The EMFAC7F program provides emission rates for Total Organic Gases (TOG). The TOG emission was multiplied by 0.91 to estimate Reactive Organic Gases (ROG).

B. URBEMIS-5

Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-5. URBEMIS-5 is a program which estimate the emissions that result from various land use development projects. Land use project can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-5 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

Inputs to the URBEMIS-5 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for project land uses and land uses removed by the project were provided by the project transportation consultant. Average trip lengths and vehicle mix for the San Joaquin Valley Air Basin were used. Average speed for all types of trips was assumed to be 25 MPH.

The URBEMIS-5 runs assumed summertime conditions. Default values for cold-start percentages were used. The URBEMIS-5 program provides emission rates for Total Organic Gases (TOG). The TOG emission was multiplied by 0.914 to estimate Reactive Organic Gases (ROG).

C. RESIDENTIAL AREA SOURCE EMISSIONS

Residential uses contain a number of dispersed and intermittent sources of pollutants such as space and water heaters, household paints and solvents, fireplaces and woodstoves, lawn mowers and other equipment. The Bay Area Air Quality Management District has developed estimated composite emission rates from residential sources; these emission factors were multiplied by the number of new residences expected to be built by 2015 to estimate daily emissions from this source. As with vehicular emissions, emissions of TOG were multiplied by 0.91 to estimate Reactive Organic Gases (ROG).

APPENDIX B

NOTICE OF PREPARATION AND RESPONSES

TABLE 4-3

VOLUME/CAPACITY RATIOS FOR VARIOUS HIGHWAY FACILITIES 4-3

Figure 9-2 8-4